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7 October 1992



JPRS Report

Proliferation Issues

PROLIFERATION ISSUES

JPRS-TND-92-036

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7 October 1992

[This report contains foreign media information on issues related to worldwide proliferation and transfer activities in nuclear, chemical, and biological weapons, including delivery systems and the transfer of weapons-relevant technologies.]

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ROK Leader Visits, Views DPRK Nuclear Issue

No Seeks Chinese Influence

*SK2809071592 Seoul YONHAP in English 0701 GMT
28 Sep 92*

[Excerpt] Beijing, Sept. 28 (YONHAP)—South Korean President No Tae-u asked his Chinese Counterpart, Chairman Yang Shangkun, Monday to use China's influence to get North Korea to accept mutual inspections of nuclear facilities by South and North Korea.

In the first ever summit between the neighboring nations, Yang told his visitor that China would not welcome either Korea having nuclear weapons.

"It is undesirable to apply open and international pressure on North Korea," however, to stop its nuclear program, Yang said.

Yang said he expected the two Koreas to achieve denuclearization of the Korean peninsula through negotiations based on the inter-Korean declaration on denuclearization issued at the end of last year.

The Chinese leader made the remarks after No said North Korea's suspected efforts to develop nuclear weapons were the greatest obstacle to practical development of inter-Korean relations.

At a conference of top officials of the two countries after the summit, No said denuclearization of the Korean peninsula was essential for peace and stability not only in Korea but also in the northeast Asian region. [passage omitted]

Meets With Li Peng, Jiang Zemin

*SK2909052892 Seoul YONHAP in English 0503 GMT
29 Sep 92*

[Excerpt] Beijing, Sept. 29 (YONHAP)—President No Tae-u met separately Tuesday with Chinese Prime Minister Li Peng and Communist Party General Secretary Jiang Zemin to discuss in detail measures to promote bilateral relations.

In his meeting with Li, No thanked China for its support for dialogue between South and North Korea and asked him to persuade Pyongyang to work for the significant development in inter-Korean relations. No also stressed the need for mutual inspections of nuclear facilities between South and North Korea.

Earlier, No and his Chinese counterpart, Chairman [title as received] Yang Shangkun, shared identical views on inter-Korean relations as well as situations surrounding the Korean peninsula and other international developments, Kim Hak-Chun, South Korean presidential spokesman, said.

With regard to the North Korean nuclear issue, Yang told No that it was not desirable to apply international pressure on North Korea to abandon its nuclear program, Kim said.

Kim quoted Yang as saying that China hoped denuclearization of the Korean peninsula could be achieved through dialogue and negotiations on mutual inspections. [passage omitted]

DPRK Nuclear Program Opposed

*SK2809084192 Seoul YONHAP in English 0826 GMT
28 Sep 92*

[Text] Beijing, Sept. 28 (YONHAP)—The Chinese Government on Monday reiterated its policy of opposing North Korea's nuclear development program, saying it has consistently supported denuclearization of the Korean peninsula.

Wu Jianmin, Chinese Foreign Ministry spokesman, explained the Chinese position at a press briefing following summit talks between South Korean President No Tae-u and his Chinese counterpart, Chairman Yang Shangkun.

The Chinese Government believed pending issues between South and North Korea would be solved through dialogue, Wu said.

Asked by a reporter from the Taiwanese UNITED DAILY NEWS whether the two leaders discussed Taiwan, Wu said that the question of Taiwan was contained in the joint statement on the establishment of diplomatic relations between Seoul and Beijing.

"As president No has already recognized Taiwan as part of China and official relations between South Korea and Taiwan have been severed, the Chinese Government believes South Korea-Taiwan relations would be maintained only on a private level," Wu said.

Chinese Role Detailed

*SK2909115592 Seoul YONHAP in English 1136 GMT
29 Sep 92*

[Text] Beijing, Sept. 29 (YONHAP)—President No Tae-u said here Tuesday afternoon he expects China will play a good role in resolving the Korean question inasmuch as China is close to North Korea, too, and recognizes the need of inter-Korean reconciliation.

At a press conference held at the great hall of the people in Beijing, president No said China's position over the issue of North Korea's nuclear arms development was that it is desirable to resolve the issue through inter-Korean dialogue and cooperation instead of through any physical pressure.

"This position of China is just the same as our own," No said.

The president said that international opinion is that North Korea should be prevented from developing nuclear arms by whatever means, however.

South Korea, he said, is persuading North Korea into translating the joint South-North denuclearization declaration into action. "We expect there would be a progress in this area in the foreseeable future," No said.

Asked how South Korea would assist North Korea if Pyongyang gives up developing nuclear arms, No said Seoul would help the North normalize relations with the U.S. and Japan.

"We will also spare no cooperation so that we could be of substantial help to the North in the area of economic assistance," president No said.

Qian Qichen Reiterates Disarmament Efforts at UN
OW2309162992 Beijing XINHUA in English
1605 GMT 23 Sep 92

[Text] United Nations, September 23 (XINHUA)—China reiterated its call here today for international efforts to undertake disarmament and strongly condemned sales of advanced weapons to interfere in other country's internal affairs.

Addressing the 47th General Assembly of the United Nations, Chinese Foreign Minister Qian Qichen said China "opposes the attempt of a country to interfere in and obstruct the normal cooperation between sovereign states under the pretext of preventing arms proliferation."

"We strongly condemn blatant violation of one's own commitment to an international agreement by selling large amount of advanced weapons and equipment to grossly interfere in another country's internal affairs," he said.

The foreign minister said China has all long stood for the complete prohibition and thorough destruction of all weapons of mass destruction.

"Pending the realization of this goal, it is necessary for the international community to take, as a transitional step, appropriate measures to prevent the proliferation of weapons of mass destruction in the interest of regional and world security and stability," he said.

"We maintain that international non-proliferation should be pursued in a fair, reasonable, comprehensive and balanced manner without prejudice to the legitimate security interests of any country and its socio-economic development, or to international cooperation in the application of science and technology for peaceful purposes," Qian stressed.

He said China would like to see that all nuclear weapon states undertake not to be the first to use nuclear

weapons or to resort to the threat or use of nuclear weapons against non-nuclear weapon states under whatever conditions.

He called on all nuclear weapon states to support proposals for the establishment of nuclear-weapon free zones, respect the status of the existing nuclear-weapon free zones and undertake corresponding obligations.

He also proposed that those countries which have deployed nuclear weapons abroad withdraw all of them back to their own territories.

As for countries with space capabilities, the Chinese foreign minister urged them to follow the principle of peaceful use of space, and immediately stop their research, testing, production and deployment of space weapons and refrain from extending their weapon systems into the space.

The United States and the former Soviet Union or Russia have reached some new agreements on nuclear arms reduction in recent years, Qian said, noting that "these agreements are well received by the international community which hopes that they will be earnestly implemented by the countries concerned".

He pointed out that it is clear to people that even after the above-said disarmaments are fully implemented, the major military powers will still be in possession of the largest arsenals of most sophisticated nuclear and other high-tech weapons and the capabilities to develop space weapons, however.

Though some of the provisions in the the chemical weapons convention, which was finally concluded after years of negotiations, "are not fair and balanced, the purposes and objectives defined in the convention have nonetheless won the unanimous endorsement and support of the international community," Qian said.

The foreign minister said China hopes that these purposes and objectives "will be observed and carried out effectively in the interest of the security of all countries."

Article on Nuclear Strength, Proliferation

HK2107102792 Hong Kong PAI HSING in Chinese
No 268, 16 Jul 92 pp 6-10

[Article by Chao Yun-shan (6392 0061 1472): "Communist China's Nuclear Might (Part One)"—part two was published in JPRS-TND-030 on 27 August, 1992 pp 5-8]

[Excerpts] **Editor's note:** On 21 May, Communist China exploded a nuclear bomb with explosive power equivalent to one megaton of TNT in Xinjiang, making it the most powerful in the history of Communist China's bomb tests. The world was astounded because it believed the test posed a threat as well as sabotage to mankind and the earth at a time when mankind is calling for the elimination of nuclear weapons and the saving of the earth. While both the United States and the Soviet Union in the past

carried out more tests than Communist China, since that was not desirable conduct, they should not have been emulated.

Exactly how great is China's nuclear might, how many nuclear weapons does it have in storage—these questions will be expounded on by this article in detail. Owing to its length, the article will be published in two parts.

To date, academic circles have failed to make a profound study of the nuclear might of Communist China. Yet, it is this nuclear might which provides the fundamental energy fueling Communist China's activities in the international community. Until communism falls in China, and within the framework of an international community where Sino (Communist China)-U.S. confrontation forms one of the cornerstones of the new world order, the nuclear arsenal of Communist China not only supports its important position and conduct, but also influences the stance and conduct of the United States in Chinese affairs.

In the article: "Will the United States Intervene in the Event Communist China Attacks Taiwan?" this writer suggested that Communist China enjoys nuclear deterrent power over the United States. If and when Communist China attacks Taiwan, the United States will not be directly involved in a head-on war with Communist China because of the latter's nuclear might. An important argument contributing to this conclusion is the nuclear might of Communist China. Not only does it possess nuclear weapons, but its nuclear arsenal has grown to a level where it can confront the world's most powerful country, a United States which not only boasts a vast nuclear might, but is also actively developing the Strategic Defense initiative program. If no intensive study of Communist China's nuclear might and its strategic role is carried out, it will be very difficult to understand the power bases for the interaction between the United States and (Communist) China, as well as its resulting phenomena in the short term or, more precisely, before the end of the CPC's regime. [passage omitted]

The following will discuss the facts and figures related to Communist China's production of 20,000-tonne nuclear bombs. A. Communist China's ability to produce Uranium-235 [U-235] nuclear warheads.

Three plants which refine pure [chun 4783], enriched [nong 3426], and reduced [suo 4799] uranium in Communist China will be considered here: The earliest enriched and reduced uranium refining plant, located north of Lanzhou City in Gansu Province and which was first put into production in 1962; the enriched and reduced uranium refinery plant No. 1, located in Ningxia's Helanshan and put into production during the Sino (Communist China)-Soviet border war in 1969, and the enriched and reduced uranium refinery plant No. 2, completed in Ningxia's Helanshan in 1975.

In the beginning, the Lanzhou refinery only had the capacity to produce some 100 kg of U-235 every year.

However, during the bar mania triggered by the "Cultural Revolution," from 1966 to 1967, the production capability of the Lanzhou plant regarding enriched and reduced uranium rose dramatically from an annual volume of 275 kg to 500 kg. But this kind of production craze led to other, negative effects, forcing the Lanzhou plant to scale down its production of U-235 to an annual volume of 365 kg.

For 12 or 13 years spanning the 1970s and the 1980s, the annual production capacity of the Lanzhou plant was kept steady within a range of 365 kg to 375 kg. It was not until 1983 that the annual production capacity of U-235 at the Lanzhou plant exceeded 400 kg. By the end of 1986, the Lanzhou enriched and reduced uranium refinery plant No. 1 had in its 24 years of existence produced some 8,250 kg to 10,000 kg of U-235 used in the manufacture of nuclear warheads.

In the 1960s, relations between Communist China and the Soviet Union deteriorated rapidly, prompting the former to intensify the development of its nuclear industry. In 1969, when the Sino-Soviet border conflict erupted into war, the Helanshan enriched and reduced uranium refinery plant No. 1 was put into production. Right from the start, its production volume surpassed the level attained by the Lanzhou plant after 20 years—an annual production volume of 400 kg of U-235. It was held in the West that the uranium production volume at the Helanshan plant No. 1 had remained stable since the plant opened 16 years before, that is, an annual production volume of 400 kg of U-235. But this appears not to be consistent with the characteristics of Communist China's military industrial operations. Based on a conservative estimate of an annual production volume of 400 kg of U-235, the Helanshan plant No. 1 should have manufactured a total of 7,200 kg of U-235 used in the production of nuclear warheads in the 18 years ending in 1986.

Meanwhile, the Helanshan enriched and reduced uranium refinery plant No. 2 was completed and put into production in 1975. Its production capacity remains unclear, but is believed to be not inferior to that of the Helanshan plant No. 1. But its production volume will be disregarded for the moment.

If only the U-235 produced in the Lanzhou plant and the Helanshan plant No. 1 is used to calculate the total amount of U-235 produced in Communist China, on the assumption that production capacity did not go up from 1986 to late 1991, then the U-235 that Communist China currently possesses should amount to 20,250 kg. Again, based on conservative calculations, where 17 kg of U-235 is used to manufacture an atomic bomb similar to the one that the United States dropped on Japan's Hiroshima (Communist China's nuclear technology in the 1980s enables it to use 17 kg of U-235 to manufacture a nuclear bomb which is more powerful than the one

dropped on Hiroshima), then by the end of 1991, Communist China could have used its U-235 to manufacture at least 1,133 Hiroshima-type atomic bombs.

Aside from U-235, plutonium-239 (Pu-239) can also be used to produce nuclear weapons. Moreover, Pu-239 can be produced easily and cheaply from nuclear reactors. Five kg of Pu-239 alone is enough to manufacture a 20,000-tonne atomic bomb. Hence, it is necessary to understand Communist China's capacity to produce Pu-239. B. Communist China's capacity to produce Pu-239.

Since Pu-239 can be produced easily from nuclear reactors and costs much less than U-235, it is therefore conceivable that the dozens of nuclear reactor plants currently operating in Communist China all have the capacity to produce Pu-239. However, an excessive supply of accumulated Pu-239 does not bring about any special advantages. To Communist China, it is enough to have an adequate supply of Pu-239 for its purposes. In the meantime, only the Baotou plant in Inner Mongolia and the Yumen plant in Gansu, Communist China's principal nuclear reactor plants in the production of Pu-239, will be discussed here.

The Baotou plant was put into operation in 1963, and at first the Pu-239 was produced for research purposes, with annual production volume a mere 10 kg. In the mid-1970s, annual production volume was gradually raised to 40 kg. In the 1980s, the plant was gradually converted into principally a Pu-239 production plant, with annual production volume maintained at around 150 kg. The power capacity of the two nuclear reactors at the Baotou plant is not very high and is placed at around 100 megawatts, hence its production capacity cannot rise unabatedly. Since it was put into operation in 1963, the Baotou plant had produced some 1,050 kg to 1,150 kg of Pu-239 by the end of 1991.

The Yumen plant is a nuclear reactor plant unlike the Baotou plant. Right from the very beginning, its objective was to manufacture the Pu-239 needed in the production of nuclear warheads. Thus, the nuclear reactors at the Yumen plant boast a higher power capacity, at roughly 600 megawatts. After the Yumen plant was put into production in 1966, its production of Pu-239 in the first year had already reached 200 kg, enough to make 40 20,000-tonne atomic bombs. After a steady production volume of Pu-239 for some 15 years at the Yumen plant, production volume was raised to 250 kg of Pu-239 per year in the early 1980s. Adding them together, the volume of Pu-239 produced at the Yumen plant since it first went into production comes to roughly 5,950 kg to 6,250 kg. Without taking into full consideration the production of Pu-239 by the several dozen nuclear reactor plants and, instead, taking into account only the bottom-line production of Pu-239 by the Baotou plant and the Yumen plant, and in line with the standard for manufacturing a 20,000-tonne atomic bomb with 5 kg of Pu-239, then the amount of Pu-239 in the hands of

Communist China is enough to produce 1,400 atomic bombs similar to the one that the United States dropped on Japan's Hiroshima.

Based on the above calculation, by the end of 1991, Communist China had the capacity to produce 2,733 20,000-tonne atomic bombs. In other words, Communist China has the ability to repeat the Hiroshima bombing incident of 6 August 1945 2,733 times. Naturally, it will not drop its bombs in the same place.

Even though the aforementioned number of nuclear warheads is 10 times the Western calculations of the nuclear warheads owned by Communist China, the assessment of a capacity supported by 2,733 nuclear warheads is still a conservative one.

The conservative estimate comes not only from the use of the bottom-line production figures from each nuclear fuel plant; from the calculation of each single nuclear warhead being made out of 17 kg of U-235; and from a zero-possibility of other nuclear reactors producing Pu-239. The principal reason for the conservative estimate comes from the major factors: 1) The U-235 produced at the Helanshan plant over the past 18 years is not included in the calculation. 2) production at third-line nuclear fuel manufacturing plants in Communist China, such as the Hanzhong [3352 0022] plant in Shaanxi, the Hongyuan [4767 0626] plant in Sichuan, and the Mianyang [4875 7122] plant in Sichuan is not included in the calculation. Compared with the production in these factories, the nuclear waste [fei liao 1683 2436] used up in the 36 nuclear tests conducted in Communist China, as well as that lost in the production process, is almost too insignificant to mention.

Hence, it would not be shocking at all to find that the number of warheads in Communist China's nuclear arsenal is more than twice the figure of 2,733.

Nuclear weapons made from U-235 and Pu-239 constitute only a part of Communist China's nuclear arsenal and represent its first generation of nuclear weapons. Communist China has at least two joint factories [as published], such as the Qinghai Huangyuan [3207 3293] plant and the Qinghai Haiyan [3189 2518] plant, which manufacture exclusively its second generation of nuclear weapons—thermonuclear warheads. The explosive power of a thermonuclear warhead (also known as a hydrogen warhead) is several dozen, hundred, or even thousand times that of the Hiroshima atomic bomb.

Inside a thermonuclear warhead, the "dynamite" is not merely U-235 or Pu-239, but the more powerful deuterate lithium (LiD). Even U-238 can become a powerful nuclear dynamite like U-235. To give readers an idea, the following figures may be studied:

Nuclear fission involving 5 kg of LiD is equivalent to 250,000 tonnes of TNT.

Nuclear fission involving 20 kg of U-238 is equivalent to 200,000 tonnes of TNT.

Nuclear fission involving 5 kg of Pu-239 is equivalent to 50,000 tonnes of TNT.

Therefore, when considering the nuclear arsenal of Communist China, it does not suffice to know how many Hiroshima-type nuclear warheads can be made out of its supply of U-235 and Pu-239; it is also necessary to know how many more-devastating thermonuclear warheads can be made out of its supply of U-238 and LiD. The following two pieces of information can help clarify the problem:

Fact number one: Of the natural uranium extracted from mineral ore, only 0.7 percent is the U-235 used to manufacture the first generation of atomic bombs, while 99.3 percent is U-238. In other words, for every one kg of U-235 extracted from natural uranium, Communist China can also acquire more than 140 kg of U-238. The amount of U-238 in the hands of Communist China is more than 140 times the amount of its U-235.

Fact number two: Long before the United States engaged in the Gulf War against Iraq, Communist China had already sold seven metric tons of hydrogen lithium [qing hua li 8641 0553 9465] (LiH) to Saddam Husayn. LiH can be used as fuel for rocket missiles and, moreover, LiD/LiH₂ can be extracted from LiH, because deuterium has the same ratio of natural isotopes as hydrogen. In other words, Communist China has an abundant supply of LiD with which to manufacture thermonuclear weapons.

Based on an analysis of the amounts of U-235, Pu-239, LiD, and U-238, they are sufficient to support Communist China's international strategic ambitions.

As for the numbers of strategic nuclear weapons and tactical nuclear weapons made from the aforementioned nuclear materials, their classifications and launch types will be discussed in the section entitled: "Nuclear Weapons of Communist China" in this article. [passage omitted]

For a comprehensive understanding of the nuclear bomb carriers of Communist China, it is necessary to focus on two aspects of the carriers, namely: capacity and numbers. A. Capacity of nuclear bomb carriers

On 26 November 1975, the 3,500-kg military satellite launched from a "Long March-2" rocket by Communist China in Gansu's Jiuquan six days before returned to earth successfully and was recovered in central China. This event showed that Communist China's nuclear bomb carriers have a certain degree of accuracy.

On 7 December 1976, Communist China used a "Long March-2" rocket to launch a 3,600-kg flying object into earth orbit. Both Communist China and the West described it as a satellite, although Communist China called it "applied satellite No. 1," while the West called it China-7. However, it was not simply a satellite. It was a triple-guidance flying object. One of them was recovered on the Chinese mainland as a returning, remote-sensing

satellite. One was a 1,200-kg flying object which stayed in space for 23 days. The third was classified by Jane's Weapons Systems as a spacecraft. This incident proved that Communist China's nuclear bomb carrier now has multiple independently targetable reentry capacity. In other words, Communist China has the technology related to multiple-warhead missiles.

In May 1980, when the third-stage rocket pencil [ji lu tou 6068 6922 7333] of the "Dongfeng [East Wind 2639 7364]-5" (CSS-4) launched from northwest China fell successfully into the South Pacific, Communist China claimed that "it had attained advanced levels in guidance accuracy and carrier capacity, marking an important stride forward in China's mastery of modern, sophisticated science and technology." It was reported that some people hidden in a submarine had tried to snatch the pencil away a few minutes before Communist China's personnel arrived, but they failed. The experiment also demonstrated the intercontinental transport capacity of Communist China's carrier vehicles.

On 19 September 1981, Communist China used one Long March-2 rocket to launch three satellites into space, the orbit being 235 x 1600 km. This again demonstrated the transport capacity of its multiple-warhead missiles.

In October 1982, with its "Gulf"-grade submarine in the Bohai as a launchpad, Communist China launched solid rocket Dongfeng-4 (DF-4 CSS-N-3) from underwater. The rocket can carry one two-megaton hydrogen warhead with a range of 2,700 km. Communist China is even actively improving this type of rocket in order to convert it into a multiple-warhead missile, the CSS-NX-4. The project is expected to be completed in the early 1990s.

On 8 April 1984, Communist China used a "Long March-3" rocket to successfully launch a geostationary communications satellite to a prescribed fixed point. The low-temperature, high-energy propulsion technology and outer space double-ignition [as published] technology demonstrated here gave Communist China the capacity to guide intercontinental missiles, defense against which is difficult.

Communist China's capacity related to rocket carriers has gradually won international recognition. Starting in April 1984, Communist China began to solicit launching business from abroad. On 5 August 1987, the returning satellite launched successfully by the "Long March-2" (CZ-2) carried two micro-gravity [wei zhong li 1792 6850 0500] installations for the French (Matela) Company; exactly a year later in 1988, a returning satellite launched successfully by the "Long March-3" (CZ-3) carried micro-gravity installations for Federal Germany's MBB Company; and in 1990, the "Long March-3" rocket launched into orbit the "Asiasat-1" communications satellite manufactured by the United States' Hughes Company for Hong Kong.

The above-mentioned showed that Communist China now has a mature capacity in relation to the various kinds of nuclear weapons carriers. B. Numbers of nuclear weapons carriers

Before 1986, while Communist China only used carriers to launch satellites two or three times a year, it was not due to its ability to manufacture carriers, but due to its insufficient number of satellites. Hence, when international business came rolling in, Communist China was immediately able to raise the number of commercial satellite launches to 12 per year. The launch rate of 12 per year may still be attributed to the size of the market, as well as Communist China's insistence on using Gansu's Jiuquan and Sichuan's Xichang as the only two official launch centers. Taking into overall consideration the manpower and material resources put in by Communist China, the strategic guiding ideology, history, and other aspects, the number of "Dongfeng-5's" (DF-5/CSS-4) manufactured by Communist China is roughly 18 per year. In other words, by the end of 1991, Communist China may already have nearly 200 'Dongfeng-5' carriers with a range of 15,000 km. Once nuclear warheads are installed in them, the carriers become weapons. This article has already described the situation related to nuclear warheads, and there is an abundant supply for the carriers.

In fact, the annual production rate of 18 "Dongfeng-5's" (DF-5/CSS-4) could be a conservative estimate. The well-known Jane's weapons Systems (1987-88) mentioned that from 1980 to 1981, some 20 "Dongfeng-5" missiles with nuclear warheads installed were delivered to China's launch base in the east.

By using the following method, it is possible to arrive at a rough number of intermediate and long-range missiles, aside from the "Dongfeng-5," in the possession of Communist China.

Take the "Dongfeng-2" (DF-2/CSS-1), which was already well-developed in 1966, the intermediate nuclear missile carrier "Dongfeng-3" (DF-3/CSS-2), and the intermediate and long-range missile carrier "Dongfeng-4" (DF-4/CSS-3), which was developed in 1971. Calculated at a production volume of 12 per year for each

carrier, by the end of 1991, Communist China would have had a total of 840 intermediate- and long-range missile carriers.

In fact, the specific production volume for each model of the "Dongfeng" line of ballistic missile carriers is determined by the strategic war thinking of Communist China, demands for advances in weapons technology, and the top hierarchy's assessment of the world political situation. The nuclear missile carriers of Communist China, ranging from "Dongfeng-2" to "Dongfeng-5," are well-developed models and Communist China has the capacity to produce them en masse.

Western academic circles often incorrectly estimate the capacity of Communist China to produce strategic missiles because their calculation of Communist China's nuclear might is based simply on the bottom-line figures provided by Communist China. If research is carried out on this basis and the conclusions obtained are used to formulate policies related to national security, very little positive value is generated. The following facts should be remembered by relevant experts:

"Jane's Weapons Systems" maintains that from 1987 to 1988, Communist China had 15 to 20 "Dongfeng-3" (DF-3/CSS-2) ballistic missiles; "The Military Balance" holds that from 1987 to 1988, Communist China had 60 "Dongfeng-3" (DF-3/CSS-2) ballistic missiles.

What shocked Western experts was that in 1987, Communist China secretly sold 36 "Dongfeng-3" ballistic missiles to Saudi Arabia as a single purchase, however. While the figure of 36 may be astounding to the West, it was no big issue to Communist China. Had the Saudis been willing to spend the money, Communist China would have been happy to sell more "Dongfeng-3's."

What is even more thought-provoking is that fact that some experts still maintain that Communist China only had 50 to 60 "Dongfeng-3's" from 1988 to 1989.

This incident shows that the number of missiles in the hands of Communist China, as conjectured and tossed about by the West, is inaccurate. Using this kind of figure as the basis for research, no matter how exquisite the procedure may be and how well-thought-out the hypothesis may be, it is still far from the truth, as it underestimates the nuclear might of Communist China and, as a result, draws erroneous strategic conclusions.

JAPAN

Argentina Concerned By Plutonium Shipment

OW2909014792 Tokyo KYODO in English 0113 GMT
29 Sep 92

[Text] London, Sept. 28 KYODO—The Argentine Government is deeply concerned over the possible passage of a Japanese plutonium-carrying vessel around Cape Horn off the southern tip of Argentina, an Argentine Navy source in London told KYODO NEWS SERVICE Monday.

The 4,800-ton Akatsuki Maru is now on its way to France and to pick up and carry home a ton of weapon-grade plutonium for use as fuel for Japan's fast breeder nuclear reactor.

As the U.S. Senate is reportedly considering legislation to ban the ship from passing through the Panama Canal, the Akatsuki Maru is expected to take a longer route through international waters around Cape Horn, the source said.

"The Navy will keep positive control of the convoy if it passes near Argentine waters, but would not escort the Akatsuki Maru and its escort patrol vessel," he said.

"If someone walks past your house with a bomb, you will of course check it passes as quickly as possible and leaves no bad situation behind."

The Argentine Navy is "very much concerned as at this time of the year there are many icebergs and difficult rough seas around Cape Horn," he said.

The Argentine Foreign Ministry is currently seeking information through diplomatic channels from the Governments of Japan, France, and United States to "assess the facts and determine the most appropriate course of action," the source said.

Japan has refused to disclose the ship's course for security reasons.

Argentine Foreign Minister Guido di Tella said in a statement earlier this month, "Taking into account that Brazil, Uruguay, and Chile have expressed similar concerns, the Argentine Government is consulting the authorities of these three countries in order to coordinate action and remove risks derived from such a voyage."

Indonesia and Malaysia have expressed concern about the possibility of the ship passing through the busy Strait of Malacca, and other countries are reported to be deeply concerned about the vessel entering their waters.

Damon Moglen, a spokesman for the Greenpeace environmental group, said, "The fact that the Japanese Government is even considering this (Cape Horn) route, shows that it is under political and public pressure to such an extent that it has been placed in a desperate situation where it is willing to consider the most risky route possible.

"The Cape Horn route is the route with the least political resistance but the route with potentially the largest safety and environmental danger. The amount of plutonium being transported could build more than 120 nuclear weapons," he added.

Greenpeace claims that scientists have proved that fires, collisions, and sinking at sea would create stresses beyond those which the plutonium containers being used have been tested to withstand.

Work Begins To Dismantle Nuclear Ship's Reactor

OW1809065592 Tokyo KYODO in English 0457 GMT
18 Sep 92

[Text] Aomori, Sept. 18 KYODO—The Japan Atomic Energy Research Institute on Friday launched an operation to dismantle the reactor of Japan's first and only nuclear-powered ship.

The institute plans to remove the reactor from the ship, now berthed at Sekinehama port in Mutsu, Aomori Prefecture, and display it for the general public in a new facility to be constructed at the port.

Operations are scheduled to be completed around the end of 1995 and with the expense of the new facility included will cost some 9.5 billion yen.

The body of the ship is scheduled for billions of yen worth of refurbishing and by about 1997 will be among the world's largest sea-going cruise vessels, officials said.

On Friday, a ceremony was held at the port for the safety of operations, and equipment to be used in the dismantling were brought on board.

The 8,242-ton Mutsu experienced reactor trouble on its maiden voyage in 1974, leaking radiation. After the accident, the Mutsu's home port was moved to Sekinehama from Ominato, also in Aomori Prefecture, following strong protests from local fishermen and residents.

All trials of the ship were completed last year.

According to the institute, actual dismantling operations will begin September 24 when the water in the bottom of the ship to cover the radiation emitted by the reactor during operation will start to be removed.

In early October, an 180-ton, 13-meter-high steel room will be constructed in the room directly above the reactor. After that, the room will be sealed tightly to prevent the escape of radiation to the outside.

Spent nuclear fuel will be removed from the reactor by opening the lid of the reactor container next spring. Around the summer of 1995, the Mutsu will be loaded onto a platform where the body of the vessel will be sliced into three and the reactor removed.

Emergency Cooling System Averts Nuclear Accident

OW2909135292 Tokyo KYODO in English 1328 GMT 29 Sep 92

[Text] Fukushima, Sept. 29 KYODO—An emergency core cooling system (ECCS) automatically shut down a nuclear reactor here Tuesday after abnormally low levels of cooling water were detected in the reactor core, officials said.

There was no leak of radioactivity, the officials said.

According to Tokyo Electric Power Co. officials, a high pressure condensation pump attached to the No. 2 reactor at the company's Fukushima No. 1 nuclear power plant stopped supplying cooling water to the reactor, causing the water level in the core to drop.

The cause of the pump shutdown was not immediately known.

The company officials said that the 784,000-kilowatt reactor began showing abnormally low water levels in the core at 3:30 p.m., when the reactor was operating at maximum capacity. The water level fell to 2.2 meters above the fuel rods from the usual level of 5.3 meters. The ECCS then began to function and the water level was restored through the pouring of water into the reactor core, they said.

The boiling water reactor, which is located in Okuma, Fukushima Prefecture in northern Japan, runs a high risk of leaking radioactivity-contaminated cooling water in case of an accident related to the cooling system, experts on nuclear plants said.

This was the second time in Japan that an ECCS, which rapidly pours huge amounts of water into a reactor's core, had worked when a reactor was malfunctioning, although they have also been mistakenly triggered three times in the past, the experts said.

In February 1991, abnormal levels of radioactivity set off an ECCS at the No. 2 reactor of Kansai Electric Power Co.'s Mihama nuclear power plant in Fukui Prefecture. No environmental damage was caused by the incident.

NORTH KOREA

IAEA Holds 36th General Assembly Session

Blix Supports DPRK Nuclear Policy

SK2509052592 Pyongyang KCNA in English 0433 GMT 25 Sep 92

[Text] Pyongyang September 25 (KCNA)—Hans Blix, general director of the International Atomic Energy Agency [IAEA], expressed support to the DPRK's peaceful nuclear policy at the 36th General Assembly session of the IAEA held in Vienna on September 21.

In his report to the General Assembly, the general director said that although it is only a few months since the DPRK submitted a report on the initial stock of nuclear material, an object of safeguards on May 4, a lot of verification work has been done through three rounds of irregular inspections.

The third inspection of the DPRK ended 10 days before, he said, adding that thanks to the excellent cooperation rendered by the DPRK, a series of detailed documents including supplementary rules have been worked out and some documents have been effective since July 10.

The DPRK offered some original texts of operation to the IAEA and provided conveniences so that members of the IAEA may inspect any place and facilities, irrespective of the report on the initial stock of nuclear material, he said.

He stressed that such cooperation of the DPRK was very beneficial and is fully used for the work of the IAEA.

DPRK Delegate Blasts Japan

SK2609010292 Pyongyang Korean Central Broadcasting Network in Korean 2100 GMT 25 Sep 92

[Text] The head of our country's delegation made a speech on 23 September at the 36th session of the International Atomic Energy Agency [IAEA] General Conference held in Vienna, Austria. He comprehensively introduced the peaceful character of our country's nuclear plan and emphasized our principled position for the fair implementation of the Nuclear Safeguards Accord. He continued to expose Japan's maneuvers to arm itself with nuclear weapons and the South Korean authorities' strategic maneuvers.

Our country's delegate pointed out: I was very surprised after listening to the Japanese delegate's speech. He distorted the truth by talking as if the DPRK has plans to develop nuclear weapons. He also made a contradictory remark by demanding that we thoroughly and quickly fulfill the overfull safeguards accord. We elucidated not once but many times that we do not have the will nor the ability to develop nuclear weapons. We have already concluded the safeguards accord with the IAEA and received nonregular (pijonggi) inspections on three occasions. We opened all nuclear facilities to the inspection team and gave the inspectors all necessary assistance so that they could carry out their duty smoothly.

Regardless of this fact, the Japanese delegate said that he urges us to unconditionally, thoroughly, and quickly fulfill the overall safeguards accord. What does he want us to quickly fulfill? The Japanese delegate does not even have an understanding of the essence of the conditions of the safeguards surveillance system. He made an unreasonable remark beyond common sense. I believe that this is due to his ignorance of reality.

The Japanese delegate unilaterally demanded that we fulfill the North-South joint declaration on denuclearization. As we had already elucidated in the June and

September Board of Governor's meeting, the issue of fulfilling the North-South joint declaration on denuclearization is not the kind of issue to be discussed at IAEA meetings. This issue must be resolved by North and South Korea. Discussions are continuously being held to resolve this issue at North-South Joint Nuclear Control Committee meetings. We mentioned at the June Board of Governor's meeting the important reason why this issue is not being resolved. Nevertheless, the Japanese delegate unilaterally demanded that we fulfill the joint declaration on denuclearization. This kind of speech by the Japanese delegate does not help at all in resolving the issue. He must realize that instead it creates complications.

Even though our Republic is smoothly receiving the IAEA's nuclear inspection, the Japanese delegate is finding fault with us. I believe that this is because Japan does not truly want denuclearization on the Korean peninsula to be realized and its purpose is to make an excuse to accelerate its work to arm itself with nuclear weapons.

Regardless of consistent opposition from the world's peace-loving people, Japan is storing more plutonium than is necessary. The only reason for this is for Japan to fabricate some kind of excuse to realize its policy of becoming a nuclear power at any time. Because Japan is currently storing plutonium under IAEA safeguards surveillance, it is claiming that this is legal. Japan is saying that there is no need to doubt its activities in storing plutonium because it is under IAEA safeguards surveillance. Then, why is it dissatisfied with the IAEA's inspection of another country?

The Japanese authorities should not use shallow tricks to realize their policy of becoming a nuclear power by laying the blame on someone else. I believe that it will be beneficial to Japan if it justly makes public its nuclear policy to international society.

Next, I cannot just ignore the speech made by the South Korean delegate. He talked as if only his side is interested in fulfilling the North-South joint declaration on denuclearization. We truly hope that the joint declaration on denuclearization can be fulfilled and are making efforts to realize it. The ones who have to deal with this issue are the Koreans, and it can be resolved only through joint North-South efforts. Therefore, I strongly urge the South side to stop slandering the other side of the joint declaration on denuclearization in an international conference, because this is an internal issue of the Korean nation, and to actively come to the North-South Joint Nuclear Control Committee meetings with an open and sincere position. I believe that this will be good for resolving practically the issue, good for the atmosphere of the IAEA General Conference, and good for preventing a waste of time.

We are operating all nuclear facilities under IAEA safeguards. We are the masters of the atomic reactors. We know what to do to safely operate the atomic reactors.

Therefore, I emphasize that the remark by the South Korean delegate is an unreasonable remark running counter to common sense. I urge that South Korea should not be oversensitive to unnecessary matters and should not act impertinently but should act discretely.

The DPRK will continue to be faithful to the idea of the Nuclear Nonproliferation Treaty, and once again promises that it will cooperate with the IAEA in fulfilling its duty to abide by the Nuclear Nonproliferation Treaty and the safeguards accord.

Criticism of Japan Continues

OW3009023692 Tokyo KYODO in English 0016 GMT 30 Sep 92

[Text] New York, Sept. 29 KYODO—North Korean Foreign Minister Kim Yong-nam accused Japan on Tuesday of keeping "more nuclear fuel than it needs" and criticized its plan to bring plutonium by ship from Europe.

"The prevention of the emergence of any new nuclear power is another important issue in settling the nuclear problem," he told the United Nations General Assembly.

"In this connection, we could not but express our concern over the fact that, despite world condemnation, Japan is storing more nuclear fuel than it needs, and is even carrying out an adventurous plan involving the marine transportation of plutonium," Kim said.

Denying Western allegations that North Korea is engaging in a covert nuclear weapons development program, Kim insisted that Pyongyang has "no need to produce them."

"It is our firm will, in line with our invariable antinuclear peace policy, to use nuclear energy only for peaceful purposes and not to develop nuclear weapons," he said.

He implicitly expressed North Korean opposition to Japan's bid for a permanent seat on the U.N. Security Council, saying a country which is not repentant about World War II aggression and crimes is not qualified for such a seat.

North Korea has accused Japan of glossing over its wartime behavior in history textbooks and criticized it for failing to pay compensation to "comfort women" who were forced into prostitution for front-line Japanese soldiers during the war.

Koreans in Japan Demand U.S. N-Arms Withdrawal

SK2709085692 Pyongyang KCNA in English 0804 GMT 27 Sep 92

[Text] Pyongyang September 27 (KCNA)—The Council of Koreans in Japan for Peaceful Reunification issued a statement on September 22, denouncing the U.S. and the South Korean authorities for having built a U.S. nuclear

submarine base in Chinhae and continuously using it, the Tokyo-based Korean News Service reported.

The statement said:

For the U.S. and the South Korean authorities to keep and use a U.S. nuclear submarine base in South Korea proves that U.S. President Bush's announcement of the withdrawal of tactical nuclear weapons and the South Korean chief executive's "declaration on the absence of nuclear weapons" were lies. The South Korean authorities' insistence on "inspection of the same numbers" is a fig leaf to conceal the U.S. nuclear bases in South Korea.

As long as the United States keeps nuclear weapons in South Korea and threatens the DPRK, neither peace on the Korean peninsula nor peace in Asia and the world can be preserved.

The DPRK has sincerely accepted inspection by the International Atomic Energy Agency and it has been proven that there is no development of nuclear weapons and atomic energy is used only for peaceful purposes.

The United States and the South Korean authorities must show not in words but in deeds that there are no nuclear weapons in South Korea.

If the South Korean authorities have an iota of national conscience, they must faithfully implement the joint declaration on denuclearization, promptly accept an overall inspection of the U.S. nuclear weapons and bases in South Korea and get the U.S. nuclear weapons and bases which might spell the scourge of nuclear war exterminating the nation totally withdrawn from there.

Envoy to Austria Urges Overall Nuclear Inspection

SK2409132792 Pyongyang Korean Central Broadcasting Network in Korean 1300 GMT 23 Sep 92

[Text] On 18 September our country's ambassador to Austria gave an interview to (Edward Knap), editor-in-chief of Vienna's (DIPLOMATIC SER PRESINSTE), on the DPRK Foreign Ministry spokesman's statement.

The ambassador said: Our people and people all over the world want to remove the danger of nuclear war and to live in a world without nuclear weapons. Our party and the government of the republic have made efforts to remove U.S. nuclear weapons from South Korea and to convert the Korean peninsula into a nuclear-free zone.

He revealed that U.S. nuclear submarines are still using its nuclear submarine base in Chinhae, South Korea, and denounced the United States.

He stressed: It is well known that U.S. nuclear weapons have been introduced and stored in South Korea. This is the first time, however, that their existence has been directly confirmed by people in charge of them. This proves that the South Korean authority's declaration of

the absence of nuclear weapons and the U.S. President's declaration of the withdrawal of nuclear weapons are false.

He also said: The U.S. and South Korean authorities persistently oppose overall nuclear inspection because they are afraid that their base, like the nuclear submarine base in Chinhae, will be discovered and that their maneuvers to prepare for nuclear war will also be discovered.

He stressed: The U.S. and South Korean authorities should admit to their maneuvers to prepare for nuclear war. They should also completely withdraw their nuclear weapons and remove their nuclear bases from South Korea and stop their slander, calumny, and antirepublic commotions, using the nuclear issue as a pretext.

He continued: The U.S. and South Korean authorities should immediately accept overall nuclear inspection of U.S. nuclear weapons and nuclear bases in South Korea at a time when the International Atomic Energy Agency is inspecting our country.

SOUTH KOREA

China To Sign Atomic Energy Cooperation Accord

SK2409124892 Seoul YONHAP in English 1235 GMT 24 Sep 92

[Text] Seoul, Sept. 24 (YONHAP)—The government plans to conclude an atomic energy cooperation agreement with China and create a Northeast Asia nuclear safety and radioactive safeguard organization at an early date.

Science and Technology Minister Kim Chin-hyon said Thursday evening that China and Japan agreed on his idea of a regional nuclear safety organization at the recent general meeting of the International Atomic Energy Agency (IAEA) in Vienna.

Meeting reporters at the Kimpo Airport upon his return home from Vienna, Kim said such a regional organization is a must in coping effectively with earth environment and greenhouse problems.

Minister Kim said that during the Vienna meeting he separately met Jiang Xinxiong, president of the China National Nuclear Industry Corp., and agreed with him on the conclusion of a Korea-China atomic energy cooperation agreement.

He said the two countries' working-level officials will meet in Beijing on Sept. 29 to discuss the proposed agreement concretely.

On North Korea's nuclear issue, the minister said that at the IAEA meeting he again called for the early implementation of inter-Korean nuclear inspections.

"I renewed the call because there has been no substantial progress in dispelling misgivings about the North's

nuclear arms development despite the recent three inspections of North Korean facilities by IAEA inspectors," he said.

Minister Kim said he asked the IAEA to take due measures to ensure the safety of North Korea's nuclear facilities, and the IAEA gave him a positive response.

After the Vienna meeting he visited the EC headquarters in Brussels where it was agreed to conclude a Korea-EC science and technology cooperation agreement in November, Kim said.

U.S., ROK To Remain Flexible on Nuclear Issue

SK2909074992 Seoul YONHAP in English 0646 GMT 29 Sep 92

[Text] Seoul, Sept. 29 (OANA-YONHAP)—South Korea and the United States have agreed to be flexible on the frequency and sites of inter-Korean mutual nuclear inspections if North Korea agrees to accept short-notice inspections and open up all suspected sites, Chong Tae-ik, director-general of the Foreign Ministry's American Affairs Bureau, said Tuesday.

Chong returned Monday from the United States, where he met with Douglas Paal, the special presidential assistant on Asian Affairs, and other officials for talks on the North Korean nuclear issue.

"If North Korea is willing to accept the two principles—special inspection and site selection that leaves no sanctuary—then we are willing to compromise on the frequency and site designation," he told reporters.

South Korea demands special inspections, which would open a suspected site with 24 hours notice and apply to military as well as civilian installations.

"South Korea and the United States believe their joint measures against North Korea's nuclear problem are having their effect such as North Korea's acceptance of inspection by the International Atomic Energy Agency (IAEA)," Chong said.

"We agreed to adhere to our principles and convince North Korea to accept inter-Korean nuclear inspection," he said.

Pyongyang demands that the two sides conduct the inspections once a year using 10 to 20 teams at once, he said.

DPRK Minister Insists on U.S. Base Inspection

SK2909231792 Seoul KBS-1 Radio Network in Korean 2200 GMT 29 Sep 92

[Report by correspondent Kim Yong-tae from UN Headquarters]

[Text] North Korean Foreign Minister Kim Yong-nam has insisted that the nuclear issue on the Korean peninsula has not been resolved because of the U.S. Army's nuclear weapons, not because of North Korea.

In his keynote speech at the UN General Assembly [29 September] today, Foreign Minister Kim Yong-nam suggested that South and North Korea conduct nuclear inspection of U.S. Army bases in South Korea first, clearly avoiding answering the ROK's demand for South-North bilateral nuclear inspection.

Minister Kim also insisted that suspicions about North Korea's nuclear development have been eliminated since the International Atomic Energy Agency's nuclear inspection. He said the United States and the ROK's allegation that U.S. nuclear weapons do not exist in South Korea is hard to believe.

ROK Named VP at IAEA 36th General Session

SK2509013692 Seoul YONHAP in English 0116 GMT 25 Sep 92

[Text] Berlin [as received], Sept. 25 (YONHAP)—The 36th general meeting of the International Atomic Energy Agency (IAEA) closed Friday. A total of 116 member countries attended the five-day conference in Vienna.

The participants discussed intensively international joint management of plutonium, ways to promote international cooperation in the nuclear safeguards and strengthening of nuclear inspections.

Senior delegates of some countries, including Japan and Australia, claimed in their keynote speeches that suspicion remained over North Korea's nuclear weapons development programs, urging North Korea to meet the IAEA's nuclear inspections in a sincere manner and accept inter-Korean nuclear inspections at an early date.

South Korea was elected as a vice president country and its ambassador to Vienna Yi Si-yong chaired the congress Thursday.

INDIA

Unauthorized Chemical Sale to Syria Acknowledged

BK2309152092 Delhi ISI Diplomatic Information Service in English 1430 GMT 23 Sep 92

[“Official spokesman’s briefing on 22 September 1992 on news report in NEW YORK TIMES entitled “U.S. accuses India on chemical arms” dated 22nd September, 92”—ISI headline]

[Text] We have seen news reports which appeared in ‘THE NEW YORK TIMES’ on 21 September 1992 entitled “U.S. accuses India on chemical weapons and other reports in the U.S. and Indian press on subject. India’s commitment to curbing proliferation of chemical weapons is unequivocal and is reflected in our export control regime. While India will continue to exercise effective control on such exports, we are confident that coming into effect of chemical weapons convention will be a positive step forward, only a universal and non-discriminatory agreement can provide the most effective means to tackle problems of proliferation. U.S. and India have also held bilateral discussions apart from multilateral discussions. Specific cases that have been brought by the U.S. to our attention have been examined and investigated by us. Specific case of M/s United Phosphorus Ltd., exporting TMP, a dual purpose chemical, in violation of our regulations to Syria, is being looked into. TMP is included in a list of chemicals whose export requires prior clearance by the government of India. In this case, the government of India’s clearance was not obtained. This violation of the government of India’s import and export regulations has been brought to notice of customs authority for instituting necessary action.

Commentary on Rao Visit to France, Uranium Transfers

BK2809052192 Delhi All India Radio Network in English 0245 GMT 28 Sep 92

[Commentary by Sushil Chopra, special correspondent of All India Radio: “Prime Minister’s Visit to France”]

[Text] The prime minister’s visit to France beginning from today is significant. It is important in the sense that after economic reforms in India no serious effort has been made to explain our liberalized policy to attract French investment. The visit was planned quite early. When the French president, Mr. Francois Mitterrand, came to India in 1989, the idea of the Indian prime minister visiting France came up at that time. When Mr. Narasimha Rao made a stopover in Paris last November on his way to and back from the G-15 summit at Caracas in Venezuela, it was then decided that Mr. Rao would go to France this month. During a brief meeting between Mr. Rao and President Mitterrand, it was felt that the trend of decline of bilateral cooperation in the political

and economic areas visible in the last two years should be reversed and Indo-French relations restored to the level it used to be a few years back.

There is vast scope for joint ventures and transfer of technology from France, but the potential has not been tapped so far. France is an important source of sophisticated technology not only in the industrial field but in defense and space technology also. Economic cooperation between India and France has been noticeable in areas like nuclear energy and space communications. In fact, France is more pragmatic in transfer of sophisticated technology than many other European countries.

Although no agenda has been fixed for talks between the prime minister and President Mitterrand, the two leaders are expected to discuss matters of mutual interest. The issue of supply of enriched uranium by France for Tarapur Nuclear Power Plant may also come up for discussion. The agreement to supply the enriched uranium by France is expiring next year. India will also explore the possibility of obtaining from France cryogenic rocket engines and other vital components which are required by our space research projects.

During his stay in Paris, Mr. Narasimha Rao will be visiting a research institution working in application of solar and other nonconventional sources of energy. An exhibition has been arranged for him where research and industrial application of solar energy will be displayed by some French companies engaged in this job. The prime minister is also scheduled to meet French industrialists and businessmen. Coinciding with the visit of Mr. Rao, the Indo-French Joint Business Council will be having its annual meeting in Paris at the same time.

Former Army Chief on Limited Nuclear Deterrence

BK2509162892 Delhi All India Radio Network in English 1530 GMT 25 Sep 92

[Text] The former army chief, General K. Sunderji, says the United States is not serious to stop Pakistan acquiring a nuclear capability. Delivering the concluding part of his National Security Lecture in New Delhi today, he said India must have limited nuclear deterrence in case of a nuclear strike against it.

About Sino-Indian ties, Gen. Sunderji said China is increasingly seeing India not as a potential adversary, but an potential ally.

Nonproliferation Talks With Pakistan Welcomed

92WP0303A Bombay THE TIMES OF INDIA in English 24 Aug 92 p 1

[Words in italics, as published]

[Text] Islamabad, 23 August: The Pakistan foreign secretary, Mr. Shahrayar Khan, said today India was willing to discuss nuclear non-proliferation in South Asia at the

bilateral level and talks on the subject would include mutual and balanced reduction of conventional weapons, reports PTI.

Talking to reporters here after his return from New Delhi, Mr. Khan said he found a "positive response" in the Indian attitude to hold discussions on nuclear non-proliferation as well as on weapons of mass destruction.

"Another forward movement" achieved during the sixth round of foreign secretary-level talks "is India's preparedness to discuss a joint declaration on biological weapons on the lines of the chemical weapons treaty," Mr. Khan said.

The Pakistan Prime Minister, Mr. Nawaz Sharif, had earlier proposed a five-nation conference comprising the U.S., Russia, China, Pakistan and India to make South Asia a nuclear weapons free zone. India had rejected the proposal then saying that the non-proliferation treaty was discriminatory and the matter had to be tackled at the global level.

Asked as to how the government would deal with certain groups and political parties which do not believe in the 1972 Simla Accord, the foreign secretary said, "The Simla Accord is a formal agreement between the two countries and that fact cannot be denied."

To a question on the disengagement of troops on the Siachen glacier, Mr. Khan said India and Pakistan have now decided to implement the already existing agreement of June 1989.

According to him, the agreement on Siachen calls for redeployment of forces and restoration of *status quo ante* as at the time of the signing of the Simla Accord.

Mr. Khan said the defence secretaries of the two countries assisted by military personnel of both sides were expected to discuss the troops.

Stressing that the talks in New Delhi were held in an "atmosphere aimed at trying to resolve problems rather than point-scoring rhetoric," Mr. Khan said while Islamabad believed that the United Nations resolutions provided a framework for resolution of the Jammu and Kashmir issue, the Simla Agreement furnished the means for achieving the same.

Pakistan's CW, Nuclear Weapons Pacts Compared

92WP0302A Madras THE HINDU in English
26 Aug 92 p 8

[Article by Pran Chopra]

[Text] The declaration on chemical weapons signed by India and Pakistan on 19 August poses two challenging questions, one to India and Pakistan, particularly to India, and the other to the international community, particularly to the United States. The question to India and Pakistan is that if they can sign a declaration that

they will not manufacture, acquire or store chemical weapons, much less to use or threaten to use them, why can they not do the same about nuclear weapons. Pakistan's answer would be short, and adequate from its own point of view, that it would be ready to do so provided India did as well. When the ball came to its court, India's first answer would also be short, but it would not be adequate, because it would invite a ding dong rally.

Obviously India's first answer would be that it has signed the Declaration because it subverts the pending international convention on chemical weapons, which has been drafted by Germany and is expected to come into effect by about the end of this year, and which India not only approves of but enthusiastically welcomes. At a seminar in New Delhi on 30 July the Minister of State for External Affairs, Dr. Eduardo Faleiro, described the proposed convention, in the form given it by Germany, as "a model for a comprehensive, non-discriminatory agreement." At one level the praise was well merited. The convention would not only bind all signatory countries to all the restrictions which India and Pakistan have placed upon themselves under their bilateral declaration. It would do much more.

First, the convention would totally ban the possession of chemical weapons by any country. Second, it would require the destruction of all facilities for manufacturing such weapons. Third, all the restrictions would equally apply to all signatories, and no signatories would be more equal than others, as they are under the nuclear non-proliferation treaty. Fourth, substantive decisions would be taken by a majority of two-thirds of the members, thus preventing domination by narrow based cartels of the kind which already control various other kinds of non-proliferation regimes. Fifth, its executive agency, the Executive Council, would have the power to challenge any member's claims of compliance, and subject them to compulsory and intrusive inspection. Sixth, an offending member, including any that used chemical weapons against a member, could be reported to the United Nations General Assembly and the Security Council. This would clearly link the convention's substantive operations to the will of the United Nations, and not only to the Security Council but also to the General Assembly, the most universal political body in existence today. Finally, the United Nations could then authorise collective punitive action against the offender, a provision clearly made to deter intending offenders.

Because of these special features of its universality, India hails the convention despite the shortcoming pointed out by some non-official experts that it does not make the punitive action mandatory and thus leaves a loophole for countries interested in thwarting the punishment of a particular offender if they can muster sufficient influence in the Executive Council or the United Nations. But this weakness does not take away from the universality of the convention, and the quality of treatment it prescribes for all members. On the other hand, NPT is clearly discriminatory in favour of countries which had set off their nuclear bombs

prior to a date arbitrarily laid down in the Treaty. India rightly objects to the discrimination.

But even this not so short an answer is not adequate, not even from India's point of view, because it overdoes the discrimination case. NPT is clearly discriminatory. But so is the United Nations Charter. It creates a special class of veto-wielding permanent members of the Security Council, according to an indefensible classification. And yet India has not walked out of the United Nations for this reason. More relevantly, the chemical weapons convention, in its effect if not in its intentions and structure, is also discriminatory, and in a very fundamental sense. It further tilts the regime for the control of weapons of mass destruction in favour of those who have reached the nuclear weapon country status and against those, such as India itself, which have abstained from that status out of self-restraint, not lack of capability. Some Arab countries are believed to have argued this very case against the chemical weapons convention. They contend the convention deprives them of the only weapon of mass destruction with which, given their technological and financial limitations, they can achieve a stand off against the nuclear weapon armed Israel. But India has not taken this stand.

The Declaration also weakens the very fulcrum on which India's refusal to sign NPT really turns, much more than it turns upon the argument of discrimination. The fulcrum is that so long as it is not proved that Pakistan has not acquired the bomb, India cannot forgo the option to do so, and the politico-technical means of proving Pakistan's innocence do not exist, on the admission of western technical experts. But it is much easier to acquire or even manufacture chemical weapons clandestinely and to hide them away than can be done in the case of nuclear weapons. And yet India has signed the Declaration and promises to sign the convention as well, but not the NPT.

If India's reason be that the convention would provide the deterrence of collective punishment of the offender and NPT does not, India would invite the question whether it would sign NPT if the Treaty also provided the same deterrent. If that is indeed so, then India should make the deterrence a pre-condition for signing NPT, and not insist on satisfactory proof of Pakistan's innocence. India would also be justified in that case in adding the deterrence to its "Nuclear Aims," which were discussed on this page on 8 August.

The international community, particularly the nuclear weapon countries, and still more particularly their unquestioned leader, the United States, also do not have an adequate answer, let alone a short and adequate one, to the challenging question posed to them by the Indo-Pakistan Declaration on chemical weapons. The Declaration is an earnest by India that it means to sign the convention with some enthusiasm. It will be doing so because it regards the convention as a "model" of universality and non-discriminatoryness, the very reasons because of which India also supports a similar

convention against biological weapons. Surely this is proof enough, if it is needed, that India would also sign NPT if the weapon countries agreed to endow it with these same qualities. Why do they not? If they are agreeable to a universal ban on chemical weapons, which is much more difficult to implement because chemical weapons are easier to cheat on than the nuclear, then why do they not so arm NPT as well?

Their answer, given in various versions, is that so long as there are bad boys around there must be a headmaster too with a rod long and strong enough for them. Otherwise there would be great risk of "physical and political spillover effects from regional nuclear wars or nuclear terrorism," the quote Victor A. Utgoff, of the Institute for Defence Analyses, Washington, who was a co-participant at a seminar on this subject near Washington in June. But he at least also added an answer, which most others do not. He said "At the same time, I don't believe that the world will accept for ever a nuclear monopoly by the permanent members of the Security Council, and I do not see how nuclear weapons can be totally eliminated. In fact the only long run answer that I can see is (that) all nuclear weapons, including our own, much reduced in number of course, are put under international control."

None of the foregoing however, absolutely none, argues against India signing the joint declaration of chemical weapons with Pakistan or signing the full convention when it is ready. It is only meant to raise questions about what India should do next in pursuing its nuclear aims which were referred to earlier. A view much heard at the seminar of the convention in New Delhi on 30 July was that by warmly welcoming the convention India would improve the credentials of its position that it is not signing NPT only because the Treaty is discriminatory.

Much better would it be for India to improve its credentials for campaigning for an NPT which, if not in the very near future then at least in some phased and time bound manner, becomes as effective and universal as the chemical weapons convention, and also to campaign that in the meantime the world must move as close as it can and as quickly as possible to the kind of international custody suggested by Dr. Utgoff for such nuclear weapons as the world might have to tolerate until their total elimination becomes possible. Such burnishing of India's credentials will not be brought about by using either the discrimination argument or China's bomb as the reason why India cannot sign the present NPT. Discrimination has been accepted in other contexts. China's bomb has been an accepted part of the world scene for so long, accepted by India too, that the world would understand a nuclear retort by India to that one at this late stage much less than it would understand a retort in kind to any nuclear trick that Pakistan might be suspected of.

Therefore India can best reinforce its credentials by unequivocally promising to sign NPT as soon as means can be found either for making certain that Pakistan has

not gone nuclear, or for disarming it in case it has already, and clearly explaining India's reluctance to give up its own nuclear option only as a response to the ambiguity posed by Pakistan. Or, if it is found to be satisfactory in the context of chemical weapons, India should extend to the nuclear context the argument given by some, as mentioned earlier, that the convention would be more satisfactory if it not only authorised collective punitive action against an offender who used chemical weapons, but made such action mandatory.

Minister Notes Readiness for Chemical Arms Pact

92WP0295A Calcutta *THE STATESMAN* in English
31 Jul 92 p 7

[Text] New Delhi, July 30—India has expressed its willingness to sign the proposed chemical weapons convention, which seeks to remove the scourge of chemical weapons by prohibiting the development, production, acquisition, possession and transfer of chemical weapons, report UNI and PTI.

Stating this here today at a seminar on "Banning of chemical weapons," the Minister of State for External Affairs, Mr Eduardo Faleiro, said: "India's commitment to a comprehensive ban on chemical weapons through an agreement that is universal and non-discriminatory is well known."

The proposed convention which is in the final stage of negotiation at the conference on disarmament in Geneva, will be a model for a comprehensive universal and non-discriminatory agreement, which will eliminate chemical weapons altogether. About 80 countries, including India, have agreed to sign the convention as original parties.

The Minister said that while the biological weapons convention was the first agreement to deal with elimination of mass destruction, the chemical weapons convention was unique because it envisaged some of the complex verification measures ever negotiated in any universal disarmament agreement.

He said the use of chemical weapons in the Iran-Iraq war was a jolt to the human conscience and spurred the negotiation forward.

Informal Talks on Nonproliferation Suggested

92WP0293A Madras *THE HINDU* in English
7 Aug 92 p 1

[Article by K. K. Katyal: "Mauritius Minister Brings Up NPT Issue"]

[Text] New Delhi, Aug. 6—The presence here of the Mauritius External Affairs Minister, Mr. A. Berenger, and his talks with the Indian hosts have served to trigger interest in the proposal envisaging an informal dialogue between the signatories of the nuclear non-proliferation treaty [NPT] and the non-signatories. A beginning to this

process, it is suggested, could be made at the time of the NAM [Nonaligned Movement] summit in Jakarta next month.

Mr. Berenger today concluded his two-day engagements here, which included a call on the Prime Minister, Mr. P. V. Narasimha Rao, and talks with the Minister of State for External Affairs, Mr. Eduardo Faleiro. The discussions covered a wide range—from bilateral to multilateral issues—and were marked by an identity of views.

Nuclear disarmament and the non-proliferation treaty, were discussed at length, presumably in the context of the pressures from big powers on these who had not acceded to the NPT. Mr. Berenger elaborated the idea he had first mooted at Harare at the time of the Commonwealth summit that the run-up to the scheduled review of the treaty in 1995 could be used for informal contacts for thrashing out differences on the modalities to check nuclear proliferation.

India, as is known, is opposed to the treaty because of its discriminatory character—the double standards it prescribes for the nuclear haves and have-nots. As was noted during Mr. Berenger's discussions, even some of the signatories to the treaty might be unhappy with the regime, envisaged by it and might be keen on changing its discriminatory provisions as also on bringing about credible nuclear disarmament. A dialogue between the signatories and others, could, thus, help give a new dimension to the non-proliferation debate.

India, as Mr. Rao pointed out, favoured the idea of informal discussions, and of making a beginning at Jakarta. Informal as against structured exchanges will be in line with the approach already adopted by India, current official-level dialogue with the U.S., and the proposed talks with Japan being the two instances.

India's opposition to a structured dialogue was evident from its rejection of the proposal for a five-power conference.

Extension Conference

In terms of the NPT, an "extension conference" is to be held in 1995 (25 years after it has been in force) to "determine whether the treaty should be renewed periodically or indefinitely." Several signatories share the view of the U.S., the U.K. and Russia in favour of an indefinite extension. Strictly speaking, the scope of this conference is limited and it could not be used for amending the treaty.

The process of amendment—which is what India wants—is covered by a stringent provision. The proposal for an amendment could be considered only if it has the support of one-third of the members, and adopted only if the majority "which must include the weapons States" is agreeable. The nuclear-haves, thus, enjoy a veto right and it is unthinkable that they would accept any change in the treaty.

As a way out, Mr. Berenger suggests additions to the treaty, so as to make it less unpalatable to those complaining against the discriminatory regime.

If this idea picks up, the period between now and the 1995 conference could be used for informal exchanges, keeping in view the new emerging realities. The approaching conference will have to be treated as an occasion for fresh thinking.

Nuclear Submarine Production Favored

BK2909105992 Delhi THE HINDUSTAN TIMES
in English 16 Sep 92 p 11

[Second installment of an article by Vice-Admiral K.K. Nayyar: "Maritime Defence-II; Funds no Hurdle"]

[Text] The size and shape of the Navy that would meet India's needs in the foreseeable future are constrained by several factors. These include the need for sufficient forces to deploy on either seaboard and in all weather conditions, the capacity of our shipyards and associated industries to produce the required hardware and, of course, the resources that are likely to be available. The vast ocean area including our outlying islands in support of which the Navy must be deployed is an important aspect which cannot be ignored. The Andaman and Nicobar Islands are nearly 800 miles away from the mainland and are sustained logistically only through the sea routes. Also, most ships must be able to operate in all weather conditions and for reasonably long periods and must have weapons and sensors suited for a variety of roles.

A frigate or destroyer is the smallest unit which meet these requirements. Such ships are also well suited for exploitation in less-than war situations (as during Operation Cactus in the Maldives in 1988) and in relief and rescue roles. Corvettes are smaller and built for specific roles e.g. anti-submarine in which profile they are just as capable. They also cost much less. Frigates and corvettes constitute the main workhorses at sea and have both visibility and presence when deployed in support of diplomacy.

Keeping in mind the outlying islands, another capability needed is that of sea lift for which specialised amphibious ships are required. Add to these some support ships such as tankers, training ships, submarine rescue vessels etc. which can be more cheaply leased from trade than built, some missile boats which are suitable for operations close to the coast and for raids on targets not too far away and a few patrol vessels to maintain vigil over our large Exclusive Economic Zone, and minesweepers to keep our main harbours safe, and the surface fleet is complete. Then come the submarines. Being vessels of stealth, they play a crucial role in denying the use of the sea to the enemy. Modern submarines are fitted with anti-ship missiles in addition to torpedoes and are potent weapons of war. No credible Navy can do without submarines.

A vessel which has been left out so far is the capital ship. In our context, aircraft carriers and nuclear submarines fall in this category. The former's main strength comes from its fighter aircraft. Without it, air superiority in the "battlefield area" can never be obtained. It is also not quite as vulnerable as made out to be. First, its aircraft ensure that the 'enemy' is engaged far away. Even if actually hit, it has much greater survivability against anti-ship missiles than the smaller ships.

The nuclear submarine falls in a different class. Though it becomes a strategic asset when fitted with long range ballistic missiles, it is a vastly improved version of the conventional submarines. Such submarines can help raise the threshold against hostile intervention by a superior opponent. Not amenable to detection by satellites they can be deployed for prolonged periods underwater. The aim should be to ultimately build the aircraft carriers and the nuclear propelled submarines indigenously.

Our ship-building capacity has grown considerably over the years. At least two shipyards can build frigates, corvettes and missile boats. Submarine construction is feasible at Bombay.

The aircraft carrier has not been built within the country so far but "prima facie", the ship can be built at the Cochin Shipyard. The yard can produce a frigate and a submarine every 18 months, and one each of a corvette, missile boat and patrol vessel/minesweeper every year. Amphibious ships (about 5,000 tonnes) can be built in four years and a capital ship like the Aircraft Carrier in 10 years. We should be able to construct a nuclear submarine in eight years after the various technologies involved have been mastered.

Given a lifespan of 25 years for frigates, submarines and corvettes, 17 each of the first two and 25 of the third category can thus be sustained on an ongoing basis. For the smaller ships having a lifespan of 20 years, a strength of 20 of each types can be kept going. Five amphibians can be maintained along with six capital ships, with a lifespan of 30 years. Support ships can be leased from trade. A force level of about 115 ships can be sustained at the existing rate of production which can certainly be improved upon. As far as financial resources are concerned, Defence allocation, if stepped up at 10 percent per year (zero real growth), would reach Rs [rupees] 21,125 crore in 1994-95. The Navy's share—at 14 percent—comes to Rs 3,000 crore approximately at 1994-95 price level and can be used as the basis for assessing minimum force level possibilities.

The Navy spends 43 percent of its budget on maintenance which leaves Rs 1,710 crore for capital investment on new ships, submarines, aircraft and infrastructure. Requirements for ship-building (for a force level of 115 ships) amount to Rs 1,275 crore annually. Another Rs 320 crore is needed every year for procurement of aircraft. Allowing Rs 150 crore annually for new infrastructure, the total comes to Rs 1,745 crore. Thus, the

force level feasible within existing shipyard capacity is also achievable with no real growth in monetary resources.

How many ships do we need? Japan has only a "Maritime Self-Defence Force", but it operates 210 ships including 20 submarines and 65 frigates/destroyers and corvettes along with other ships. It has no known enemy and its coastline is less than one half of ours. China operates as many as 220 ocean-going vessels including 92 submarines (five nuclear) and over 60 frigates/destroyers. Acquisition of aircraft carriers is being planned. So obviously India needs a force of some size. In 1964, the Emergency Committee of the Cabinet envisaged a Navy of good size comprising a couple of aircraft carriers and cruisers and a fairly large number of frigates/destroyers, corvettes and submarines. These figures have not been updated in the last 30 years. Things have changed a great deal and it is time for the political leadership to stipulate firm force levels again.

To meet additional commitments in the near future, a 125-ship Navy comprising five to six capital ships, five support ships, five amphibious vessels, 25 each of frigates and corvettes, and 20 each of submarines, missile boats and patrol vessels/minesweepers should be adequate and achievable. By 2025, we must have a 200-ship Navy. India needs a strong and credible Navy to meet its security needs. This is achievable within the existing constraints. All that is needed is a clear vision and unambiguous political direction.

Carriers Developed for New Generation Missiles

92WP0296A Madras *INDIAN EXPRESS* in English
25 Jul 92 p 11

[Text] Hyderabad—Indian defence scientists have developed a state-of-art armoured combat vehicle that will carry and launch three of the range of deadly missiles—Trishul, Akash and Nag—produced by the Defence Research and Development Laboratory (DRDL) here.

Sarath, the infantry combat vehicle (ICV), has been innovatively modified by scientists at the Avadi-based Combat Vehicles Research and Development Establishment (CVRDE), to suit the new generation missile systems that are to be inducted into the armed forces in the next few years.

Sarath is basically a Russian designed BMP-II tracked ICV being produced under technology transfer at the ordnance factory in Medak district of Andhra Pradesh, according to "Astra", the house journal of DRDL.

The CVRDE has added an additional bogey wheel and lengthened the chassis of Sarath to adapt to the quick reaction, short-range Surface Missile—Trishul. The Trishul Combat Vehicle (TCV) and Mobile Command Post (MCP) have also been suitably altered to ensure that the missile delivery is perfect.

The TCV is the main fighting platform, while MCP houses the main decision support system for the weapon. Prototype versions of both these platforms made at Avadi have been rigorously tested cross country.

For the multi-target, surface to surface Akash missile, Sarath has been redesigned by CVRDE. For Akash, launcher and radar are housed on separate tracked platforms.

The launch prototype has already been produced by the Bombay-based Tata Electronic Company (TEC) based on DRDO design and the radar vehicle by the Electronics and Radar Development Establishment (ERDE) at Bangalore.

Details Released on Prithvi Launchings

Eighth Launching on 18 Aug

92WP0301A Bombay *THE TIMES OF INDIA*
in English 19 Aug 92 pp 1, 14

[Text] New Delhi, 18 August: The improved indigenous surface-to-surface missile, Prithvi, was successfully test-launched for the eighth time today, marking yet another milestone in the path towards achieving self-reliance in this crucial high-tech area.

The medium-range (250 km) missile was successfully fired from a mobile launcher at the interim test range at Chandipur-on-sea in Orissa at 9:30 a.m. The test launch, scheduled for yesterday was postponed to today due to inclement weather at the site.

Dr. A.P.J. Abdul Kalam, the architect of the indigenous missile programme and director-general of the Defence Research and Development Organisation (DRDO), and the defence minister, Mr. Sharad Pawar, witnessed the launch at the site in the Balasore district of Orissa.

Earlier, the district administration shifted 61 families consisting of 600 villagers from three surrounding villages to nearby Kusumali. The evacuees were compensated and could return to their villages after the launch.

Another test-launch of Prithvi is planned for next week. Defence scientists plan to conduct 11 or 12 trial launches before its deployment in the field.

Prithvi is one of the five missiles under various stages of development as part of the Rs. 800-crore Integrated Guided Missile Development Programme (IGMDP). The seventh test launch on 5 May last was also successful. Both, the seventh and eighth test flights, were at Chandipur while the previous six tests were carried out from Sriharikota near Madras.

Prithvi was test-fired for the first time on 25 February 1988.

Developed indigenously with almost all the components made in the country itself, Prithvi uses a liquid

propellant, also produced here. The missile is a modified version of the indigenous Satellite Launch Vehicle (SLV-3) which put a 100-kg satellite in a low-earth orbit in last May.

Defence scientists had improved the design and incorporated some new feature to overcome some problems noticed during earlier test flights. The last two successful test flights have vindicated the new designs. Experts say the improved designs are proof of Indian scientists' capabilities and expertise in this vital sector.

The missile is currently under production at the public sector, Bharat Dynamics Ltd., Hyderabad, and the user trials by the army will begin later this year. Prithvi is likely to be inducted by the army next year. Improved design features have been incorporated into the missiles under production.

Prithvi is a quick reaction mobile-launched medium-range missile which could be used as a tactical weapon in the battlefield. It is mounted on an eight-wheeled truck, manufactured under licence by Bharat Earth Movers Ltd., Bangalore. It has a range of 250 km warhead. If the warhead weight is increased to 1,000 kg, the range will be 150 km.

It is designed to deliver a conventional warhead, a high-grade explosives, deep into the enemy territory. Defence planners reckon that the army would be able to use Prithvi to destroy the enemy's concentrated troop formations, sensitive installations, strategic command bases and airfields.

Missile technologies are severely protected by various control measures by industrialised countries and Russia. The seven-nation Missile Technology Control Regime (MTCR) restricts the export of missiles with over 1,000 kg warhead. Such missiles are not easily available in the international market.

During the sixth test launch, the missile tilted 15 degree and its structure could not withstand the stress on it.

This structural weakness has since been rectified and two successful test launches have confirmed the improved design. The missile also has a navigation system with advanced computers. This will improve the accuracy of hitting the target and is capable of making slight corrections in the flight to home-in on the target.

Ninth Launching on 29 Aug

92WP0301B Bombay THE SUNDAY TIMES OF INDIA in English 29 Aug 92 p 7

[Text] Chandipur-on-sea, 29 August (PTI): India's indigenous surface-to-surface missile, Prithvi, was successfully test-launched from the Interim Test Range (ITR) here this morning, according to official sources.

The launching took place at 10:43 a.m. in clear weather watched by scientists of the Defence Research and Development Organisation (DRDO).

The launching of the "Prithvi," which marked yet another milestone in India's progress towards achieving self-sufficiency in this crucial high-tech area, was witnessed by the adviser to the defence ministry and director general of the DRDO, Dr. A.P.J. Abdul Kalam, the deputy chief of air staff and the director, artillery.

This was the ninth launching of the missile, the third from the ITR. The "Prithvi" was last launched 11 days ago from Chandipur.

The "Prithvi" is one of the five missiles under various stages of development by the DRDO under the Rs. 800 crore Integrated Guided Missile Development Programme (IGMDP).

It has the capacity to carry 250 kg to 1,000 kg payload and its induction into the defence services was expected shortly.

The missile was test-fired for the first time from Sriharikota rocket launching centre in Andhra Pradesh on 25 February 1988, where the subsequent five tests were also carried out.

The seventh, eighth and ninth experiments on the missile were conducted from the ITR, which came into prominence after the "Agni" missile was test fired from there in the late 80's.

Trishul, Prithvi Missiles Ready for Use

92WP0294A New Delhi PATRIOT in English 3 Aug 92 p 5

[Italicized words as published]

[Text] Hyderabad, Aug 2 (PTI)—Indian missile scientists are busy finetuning Trishul—the quick reaction surface to air missile—for trials to knock out a mock-up aircraft in mid-air with active warhead in the coming months.

The scientists have been encouraged by the recent success of Trishul in engaging a Pilotless Target Aircraft (PTA) in combat for four seconds in tests at the interim test range in Chandipur, according to the house journal *astras*, of the Defence Research and Development Laboratory (DRDL) here.

The PTA, developed by the Bangalore based Aeronautical Development Establishment (ADE), was used for the first time along with the short range sam [Surface to Air Missile]—Trishul, by missile scientists.

Two more crucial functions of Trishul, which is in its final stages of development, the modified folded-fin configuration was also demonstrated when the stabilising fins easily snapped open as the missile was fired from the launch container, scientists claimed.

Meanwhile, Prithvi surface-to-surface battlefield missile, with improved design, has successfully undergone test trials and is all set to enter the next stage of trials by the user—Indian armed forces, later this year.

The seventh launch of the missile from ITR [Interim Test Range], Chandipur, in April confirmed the modifications in control and propulsion subsystems aimed at raising over-all performance of the missile.

Missile scientists said Prithvi was launched from the newly designed mobile launcher combined with a launch control centre, harnessing the specially developed application software. Further, the trial also established the utility of liquid propulsion engine and inertial navigation hardware provided by the Hindustan Aeronautics Limited (HAL) and ordnance factories.

Defence scientists at DRDL are also gearing up for the third launch of the reentry technology demonstrator, Agni, before the end of 1992 from the ITR in Chandipur, Orissa.

The second test flight of the Intermediate Range Ballistic Missile (IRBM) on May 29, missile scientists agreed fell short of successfully testing mission objectives. After a perfect take-off, a systems snag during flight cut short the missile performance in a few critical areas, defence scientists said in Astra.

The other two missiles, Nag, the anti-tank missile, and Akash, the multi-target surface to air system are in advanced stages of trials, the scientists added.

IRAN

Reaction to Nuclear Pact With China Reported

NC2709133392 Tehran TEHRAN TIMES
in English 14 Sep 92 p 2

[Editorial: "The World Is Still Dominated by Gunboat Diplomacy"]

[Text] At the end of the Iranian President's visit to China, it was announced that Iran and China had reached agreement to collaborate on peaceful employment of nuclear energy. According to the agreement, Iran and China will create a 300 megawatt nuclear power plant, and concerning the objectives of the agreement it has been said that peaceful use of nuclear energy was intended.

Following the announcement of the agreement, the American Foreign Secretary spokesman, Richard Boucher, warned China regarding the agreement, and claimed that Iran was intending to acquire nuclear arms.

Exactly on the day the American Foreign Secretary spokesman expressed his concern over the accumulation of nuclear arms in the Middle East, President Bush

announced that America was selling 72 advanced F-15xP [as published] aircraft worth \$5 billion to the Saudi Arabia.

As a matter of fact the Middle East has been a reliable customer of arms manufactured by the East and the West, in particular by the United States, in the past decades and has always been paying in cash. It is interesting to note that while they keep selling arms to the Middle East countries and thus manage to recycle the petrodollars back into their economic systems, they do not forget to appease the world public opinion by expressing concern over the accumulation and sale of arms to the Middle Eastern region. Now they have picked the pretext of the creation of a nuclear power plant in order to pressure Iran and China. The hypocrisy of this expression of concern over arms proliferation is revealed when one considers that they are providing all the necessary means for the creation of nuclear arms to an aggressive regime like Israel which disregards all resolutions issued by the Security Council, and uses violent and repressive methods unscrupulously. It is quite evident, of course, that America's real motive in warning China and launching a propaganda campaign over the conclusion of a scientific-economic agreement is to prepare the ground for sale of more weapons to the fairly rich governments of the southern Persian Gulf littoral states.

But the principal question relates to the international, legal bases of the United States' warning. What are the international laws and regulations which give America the right to issue warnings to nations over the conclusion of economics agreements?

If the warning had come from an international body, it might have been worth some consideration. But by what right does a superpower that has lengthy records of violating international laws and regulations, issue such warnings?

One can only accept the remarks of the Chinese Prime Minister, Li Peng, who said in his visit with President Hashemi-Rafsanjani, that "The world is still dominated by the gunboat diplomacy of the power countries."

Amrollahi Addresses IAEA Conference

LD2409213792 Tehran IRNA in English
1601 GMT 22 Sep 92

[Text] Vienna, Sept. 22, IRNA—While initiatives for the prevention of nuclear proliferation as well as enhanced control and verification mechanisms should be applied and enforced without discrimination, they should not impede legitimate and peaceful development programmes said the vice-president of the Islamic Republic and president of the Atomic Energy Organization of Iran (AEOI), Reza Amrollahi.

Amrollahi who is also President Akbar Hashemi-Rafsanjani's deputy, was speaking here Tuesday during

the general debate at the general conference of the International Atomic Energy Agency (IAEA).

He said that "in Islam, knowledge and virtue are one and the same thing since knowledge without virtue is meaningless.... Knowledge without virtue in the nuclear field would not present any assurances for the well-being of society. The best proof of this, of course, are the tragedies of Hiroshima and Nagasaki".

Amrollahi emphasized that the conference should note and condemn the atrocities perpetrated against European Muslims in Bosnia-Herzegovina.

"The sheer magnitude of the tragedies in the Balkans required urgent and decisive preventive responses from the Security Council as well as the European Community.

"However, not only were such responses not forthcoming but even the human-rights activists and organizations, usually vocal on much more mundane issues remained silent".

Islamic Iran, he continued, fully subscribed to the campaign against the proliferation of the weapons of mass destruction and their means of delivery, as a noble cause.

"We support this on humanitarian grounds and also for the simple reason that during the recent past Iran has been the only state which suffered the deployment of chemical weapons against its people", he added.

Amrollahi acknowledged the justified concerns about proliferation of such weapons are a direct consequence of misguided policies of certain regimes.

"Let us not forget that also to blame are the industrialized states which knowingly, or unwittingly, assisted the development of 'parallel' programmes in such states, however. Nevertheless such belated policies, if indeed effective in stemming the proliferation of weapons of mass destruction will have our full support", he remarked.

Iran was the first state to propose the establishment of a nuclear-weapon-free zone (NWFZ) in the Middle East and continues to promote this issue.

Obstacles to the successful implementation of non-proliferation treaty (NPT), the agency full-scope safeguards system and a NWFZ treaty still remain, added Amrollahi.

Nuclear weapons states party to the NPT never completely fulfilled their obligations, be it related to technical support of peaceful nuclear programs in developing states, or on the opposite side of the spectrum, preventing the transfer of nuclear materials and technology to states suspect of aspiring to 'parallel' programmes.

The head of the Atomic Energy Organization of Iran (AEOI) noted that neither pressure nor any form of

sanctions were brought to bear against states with well-known 'parallel' nuclear programmes to accede to the NPT. There have also been cases where regimes with well-known and entirely non-peaceful nuclear programs were allowed to proceed unimpeded.

"In this context, well-researched and authoritative documents, based on credible sources, are available which describe how Israel developed its nuclear weapons with full knowledge and tacit approval of some, if not all, of the nuclear-weapon states", he pointed out.

He said states not party to the NPT never felt obliged to accept the agency's full-scope safeguards regime but in some cases agreed to voluntary-type safeguards agreements which only served to burden the already strained IAEA budget.

Amrollahi observed: "Ironically Israel and other states not party to the NPT and thus beyond the verification mandate of the agency, were allowed to remain IAEA members and even benefit from its technical assistance.

"Indeed how could one reasonably expect various regions to become free of nuclear weapons when states within those regions have already acquired nuclear weapons clandestinely and persistently refuse to forfeit that option.

"Regrettably the NPT depositaries neglected to prevent the clandestine acquisition of nuclear weapons on regional bases. Whether this has been pure political negligence or some sort of favouritism the fact remains that it has provided incentive for the neighbouring states to seek parity".

The Israeli regime has for years arrogantly defied nuclear control and verification while a number of states including those in the Middle East have recently sought adherence to the instruments of nuclear control and verification.

Amrollahi said: "This trend has made the position of Israel, vis-a-vis the proliferation issue, much more isolated and its negative stance, in the face of present trends, even more unacceptable and inexplicable.

"In seeking a way out of this isolation the Zionist-dominated news media and institutions, as well officials of the Israeli regime have embarked on a propaganda campaign, highlighting the weaponization programs of certain Middle East states including the Islamic Republic of Iran".

He referred to the statement made by an Israeli official in June "whereby he predicts with amazing foresight that Iran would within 10 years develop nuclear weapons. He then justifies military action on the strength of such absurd deductions".

The vice-president added that the agency circulated Iran's response to the blatant Israeli threat.

The IAEA mission to Iran in February and the subsequent agency reports proved that the Islamic Republic's nuclear programmes contrary to adverse publicity are entirely peaceful.

"We invited the agency mission to visit Iran under our own initiative and the invitation remains open since we do not intend to hide anything. Such openness and transparency should be reciprocated by support in implementing peaceful programmes not by the imposition of more stringent restrictions", he noted.

Referring to the Bushehr nuclear power plant which the German Government refused to provide the export licences for the completion of the plant, Amrollahi said that billions of dollars has been invested while the cost of its maintenance is an ongoing financial burden.

Restrictions were imposed in spite of the award of the ICC [International Chamber of Commerce] which compels the supplier to complete the plant or hand over outstanding components and documents to Iran.

The Iranian official said: "We believe that given the adverse environmental consequences of utilizing fossil fuels, hydro and nuclear energies are the only practicable alternative for generating electric power on a large scale.

"The developing states, having accepted all the required control and verification mechanisms should therefore not be deprived from this option through unfair and arbitrary restrictions".

Amrollahi announced that cooperation agreements were recently signed between Iran and China, and also with the Russian Federation, within the framework of international rules and standards including IAEA safeguards.

Nuclear Free Zone Said Possible Within Two Years

*LD2409180692 Tehran IRNA in English
1630 GMT 23 Sep 92*

[Text] Vienna, Sept. 23, IRNA—Vice President of the Islamic Republic and President of Iran's Atomic Energy Organization of Iran (IAEO) Reza Amrollahi told IRNA Wednesday that the Director General of the Vienna-based International Atomic Energy Agency (IAEA) Hans Blix had expressed optimism that a nuclear-weapon-free zone (NWFZ) could be realised within the next two years.

Earlier Amrollahi at a press briefing said that the four nuclear power plants Iran intends to purchase from the Russian Federation and People's Republic of China have a capacity of less than one unit of the partly completed Bushehr nuclear power plant.

He said that last month a general agreement was signed in Tehran between the Islamic Republic and the Russian Federation for the construction and operation of two VVER-440-213 [water cooled, water-moderated reactor] type nuclear power plant units in Iran.

He also referred to negotiations with the People's Republic of China for the purchase of two 300 megawatt Westinghouse-type reactors designed and manufactured mostly by the Chinese. A general agreement was signed with the Chinese side when Amrollahi visited China recently.

No contracts have been signed with either the Russian Federation or China, however. "We have had the opportunity for commercial contacts—they were in the negotiation stage," Amrollahi said.

"We believe in full-scope safeguards and we try to be very open and transparent, as we should".

He pointed out that Iran lacked diverse energy resources apart from oil and gas. It did not have sufficient water resources for hydro-electric generation. "At the moment, the best use of gas is for heating purposes in towns and districts since it is clean and we would prefer to save it for the cities and some for export".

There were power shortages, and there is need for additional electrical generating capacity for factories. Iran's objective is to have nuclear power plants for electricity and for desalination plants.

Commenting on the Bushehr project Amrollahi said "that the court of arbitration had already decided that the Germans should complete the work and in case we decided not to give them the contract they are obliged to provide blueprints and equipment to any other contractor we decide".

Regarding applying the ruling, talks had taken place but there are "some difficulties" he acknowledged. He added "we hope to solve this problem in the future".

The vendors claim that they are unable to obtain export licences for completion of the Bushehr nuclear power plant while the German Government speaks of "difficulties".

Answering a question of the risk that Iran would be exposed to if the Bushehr project were completed Amrollahi referred to the first nuclear bomb strikes on Hiroshima and Nagasaki. "If they did something wrong it does not mean that everyone should quit".

The Israelis bombed the Iraqi nuclear plant at Tammuz regardless of the [word indistinct] and safeguards. "I think they are violent.... If the Iraqis did exactly the same, it does not mean everybody should quit. It is the same for the Germans because they also have nuclear power plants.... It can happen to them, to any other party".

Amrollahi suggested a nuclear-weapon-free zone as the answer. Iran supported a NWFZ in the Middle East, he added.

IRAQ

UN Inspectors Monitor Chemical Weapons Capability

Munitions Probably Hidden

PM2409151092 Paris LE MONDE in French
24 Sep 92 p 6

[Report by Jacques Isnard: "Baghdad Able To Conceal Chemical Munitions"]

[Text] A UN team of chemical weapons experts arrived in Baghdad on Monday 21 September to examine the state of progress in operations to collect Iraqi chemical weapons with a view to destroying them. According to Bernard Brunner, the head of the mission, the experts are to visit several sites to "see if the chemical weapons stockpiled there have been moved or destroyed."

The Iraqis have probably succeeded in hiding many chemical munitions from the UN inspectors, and Saddam Husayn's chemists, who are Western-trained, are still there to continue to put their expertise at the service of his regime if necessary. This is the conclusion which two of the French officers, members of the UN monitoring missions on Iraq's chemical capability, have drawn and which they reveal in the latest issue of CAHIERS DE MARS, the publication for students and former students of the Military Academy.

After the Gulf conflict, the United Nations sent a series of missions to Iraq with the aim of determining as accurately as possible how the chemical arms manufacturing installations in that country operated and hence in what conditions munitions were stockpiled. Eight French army officers and an engineer from the General Delegation for Armaments, together with allied experts, were members of five of the seven inspection missions sent by the United Nations in 1991 and 1992.

According to two of these experts, Lieutenant Colonel Alain Jacquemet and Major Patrick Dewez, who are publishing their evidence with the agreement of their superiors, "there are three main conclusions which the inspectors draw from their missions: 1—the Iraqi "vehicles" best equipped with munitions were the planes; 2—there are many signs which suggest that munitions were hidden to prevent them from being inspected; 3—Iraqi chemists, mainly educated at Western universities, have shown themselves to be highly competent, displaying efficiency and pragmatism." The article's two authors add: "With regard to the future, there is reason to be concerned about the risk of proliferation and to consider the problems which an international monitoring body will have."

Most of the munitions contain mustard gas and what the Iraqis call "sarin," a chemical agent composed of a mixture of two neurotoxins of the G family of agents. This so-called Iraqi sarin contains sarin proper (GB to use the NATO code) and an agent which is known but

apparently not hitherto used for military purposes—GF—which is less volatile than sarin and has characteristics close to those of soman (GD).

Weapons Dropped From Aircraft

"The choice of a mixture of GB/GF for the Iraqi sarin," the two officers note, "corresponds to the search for greater efficacy, especially at high temperatures, but it could also be a way of reducing import problems relating to the raw materials," involved in its production and less closely monitored because they are regarded as not for military use.

The Iraqis have four types of chemical munitions. First, bombs dropped by airplanes weighing between 250 and 500 kg and filled with between 60 and 150 liters of mustard gas or between 100 and 250 liters of Iraqi sarin. Second, 122mm rockets filled with Iraqi sarin. Then 155mm shells containing three liters of mustard gas. Finally, a few SCUD missile warheads containing 150 liters of Iraqi sarin.

"The preferred launch vehicle (in view of the volume of available agent) is obviously the airplane," the two French experts comment. "This would partly explain the nonuse of chemical weapons by the Iraqis during the Gulf operations, because the Iraqi planes were grounded from the start by allied air operations.... The chemical SCUD missiles are equipped with warheads manufactured by the Iraqis. These warheads, because of their design, do not seem capable of tolerating the rise in temperature linked to the missile's reentry into the atmosphere."

From their inspection in Falujah and Muthanna, a series of sites around 60km west and 100 km north of Baghdad, which produce chlorine and pesticides for both civilian and military use, the two officers report that Iraq is without chlorine for the purification of drinking water. In addition, the United Nations is refusing Saddam Husayn the right to resume production of this substance. One of the effects of this measure in Iraq is that "water distribution networks have become polluted for lack of chlorine" and this is leading to "the appearance of many diseases which are difficult to treat, for lack of drugs, because the pharmacies are very short of supplies."

CW, Ammunition Discovered

NC2609133492 Paris AFP in English
1310 GMT 26 Sep 92

[Text] Baghdad, Sept 26 (AFP) - U.N. inspectors on Saturday found chemical weapons and ammunitions that Iraq should have transferred to a common site where they are to be destroyed.

Team leader Bernhard Brunner of Switzerland told reporters that the team visited two sites near al-Habbaniyah, 60 kilometers (37 miles) west of Baghdad, and found "weapons had been stored" there.

Brunner said chemical "weapons and ammunition" which should have been rounded up and transferred to al-Muthana, 130 kilometres (80 miles) northwest of the capital, were found in al-Habbaniyah at "declared sites."

"Iraq was told to move those to al-Muthana," he said, adding there was "no problem" with the Iraqi authorities.

The mission—the 44th sent to Iraq under U.N. resolutions calling for Baghdad's disarmament in the wake of the 1991 Gulf war—is to determine whether Iraq has moved all its chemical weapons to the al-Muthana desert site, where destruction plants have been built under U.N. supervision.

A previous U.N. inspection team said before leaving Iraq on September 12 that almost all Iraq's chemical weapons had been transferred there.

Brunner said Friday that since his six-man team began its mission Tuesday it had visited "two to three" suspect sites that had not been declared by the Iraqi authorities.

IAEA Demands Compliance With Nuclear Obligations

*LD2509154592 Bern Swiss Radio International
in English 1500 GMT 25 Sep 92*

[Text] The International Atomic Energy Agency has strongly condemned Iraq for not carrying out its obligations regarding nuclear nonproliferation agreements.

The Vienna-based organization passed a resolution demanding that Iraq comply immediately and fully with all its obligations. It also called on Iraq to cooperate with the United Nations inspectors overseeing the elimination of its weapons of mass destruction in accordance with UN resolutions.

Iraq was the only one of the 79 members to vote against the resolution, although 11 others abstained.

Minister Urges IAEA To Lift Ban on Technical Aid

*JN2309112292 Baghdad INA in Arabic
1027 GMT 23 Sep 92*

[Text] Vienna, 23 Sep (INA)—Iraq has called on the International Atomic Energy Agency [IAEA] to lift the ban imposed on technical aid provided by the IAEA, especially with regard to medicine and agriculture.

In a speech at the IAEA's general conference, currently being held in Vienna, Austria, Dr. Humam 'Abd-al-Khaliq 'Abd-al-Ghafur, minister of higher education and scientific research, said that Security Council resolutions allow Iraq to use radioactive isotopes for medical diagnosis and treatment. The IAEA has prescribed a highly complicated mechanism if Iraq wants to get these isotopes, however. Nevertheless, we have asked for some isotopes, he said.

He added: More than 10 months have passed and Iraq has still not received any assistance, at a time when the number of patients who are suffering from diseases and are dying is increasing.

The minister of higher education and scientific research added that the IAEA has suspended technical aid to Iraq since August 1990, despite the fact that this assistance is not part of the banned activities under the Security Council resolutions.

He further noted that the IAEA should not be turned into a tool to deny the Iraqis education and plague them with illiteracy, thus contributing to scientific and technological backwardness in Iraq.

Dr. Humam 'Abd-al-Khaliq also spoke about the deliberate comprehensive destruction inflicted by the U.S.-Atlantic-Zionist aggression against Iraq, which paralyzed all economic and services sectors. He added that Iraq has fully and positively cooperated with the UN inspection teams which visited the country.

The minister also talked about weapons of mass destruction. He said that Article 14 of UN Resolution 687 calls for making the Middle East free of weapons of mass destruction. He added: Although a long time has passed since this resolution was issued and despite the continued harassment of Iraq and the fabrications by some well-known quarters against it, no step has been taken to implement this part of the resolution.

He noted that it is time for the IAEA to take serious steps in this direction to achieve peace, justice, equality, and respect for sovereignty.

He added that the first thing that the IAEA should do is put all Israeli nuclear facilities under complete supervision within the safeguard program and eliminate Israel's nuclear and other weapons of mass destruction. This is the best solution for achieving stability and security in the region.

The minister also talked about the impact of the unjust blockade imposed on Iraq for over two years, saying that it is time to lift the blockade from the steadfast Iraqi people.

Regime Plans To Use Chemical Weapons in South

*LD2409100492 Tehran IRNA in English
0725 GMT 24 Sep 92*

[Text] Tehran, Sept. 24, IRNA—The Iraqi regime plans to deploy chemical weapons against the residents of the country's southern marshlands in order to get control over the area.

The spokesman of the Supreme Assembly of the Islamic Revolution of Iraq (SAIRI) announced that the Baghdad regime, in order to prepare the ground for chemical attacks, is speaking of the need to spray pesticide on the reed bed of the southern marshlands.

He called on international bodies to better supervise the area in order to prevent Iraq from committing new crimes.

ISRAEL

Gur Assesses Threat of Syrian Chemical Arms

TA2509115992 Tel Aviv IDF Radio in Hebrew
0600 GMT 25 Sep 92

[Text] Peace is being discussed in Washington, but the defense establishment should regard the Syrian chemical threat with utmost seriousness. This remark was made by Deputy Defense Minister Mordekhay Gur. He said that the Syrian arms race continues even these very days, in parallel with the peace process. Gur spoke with our correspondent Netan'el Semrik:

[Begin recording] [Semrik] Recently, the Syrians have been purchasing tanks in Czechoslovakia, self-propelled guns in Bulgaria, scuds in North Korea, and—as the international media has recently published—Syria has been buying raw materials for the production of chemical weapons, and producing them itself. Deputy Defense Minister Gur made it clear that Syria continues its armament process even now.

[Gur] They believe that, in parallel with the political process, it is important that they stay strong. Perhaps this is because they want to make sure that though the political process continues, they still have the military option.

[Semrik] Deputy Minister Gur stressed that Israel will continue to take action to stop the production of those chemical weapons.

[Gur] There is no need to panic, but we—those in charge of the defense establishment—must certainly view this with utmost seriousness. [end recording]

Gur Assesses Prospects for Arrow System

TA2409115392 Tel Aviv IDF Radio in Hebrew
1100 GMT 24 Sep 92

[Text] Israel and the United States have an understanding that the Arrow antiballistic missile project will continue. That was stated today by Deputy Defense Minister Mordekhay Gur. He added that there is no doubt that the basic concept behind the Arrow missile has been proven right. Our correspondent Netan'el Semrik spoke to Deputy Minister Gur:

[Begin recording] [Semrik] The Arrow antiballistic missile is designed to intercept surface-to-surface missiles at a high altitude, thus limiting the damage caused by their chemical warheads. Now that the Arrow's fourth test launch has been deemed a success, Deputy Defense Minister Mordekhay Gur said that Israel will continue to develop the project as quickly as possible.

[Gur] There is no doubt that from the moment it was proven that the Arrow project's basic concept was right, there is greater hope of developing an effective defense system.

[Semrik] Is this any indication that the project will be continued?

[Gur] This is not just an indication. That was the preliminary understanding, with the United States as well. Therefore, we are all happy now because, first of all, Israeli technology has proven its mettle, which is of international significance in itself. This is tremendously important for the relevant industries. Third—and this goes without saying—if the coming test launches also prove successful, it definitely creates the possibility of our having an antiballistic defense system within the foreseeable future. [end recording]

23 Sep Test Launch Detailed

TA2309203792 Jerusalem Qol Yisra'el in Hebrew
1705 GMT 23 Sep 92

[Report by army affairs correspondent Karmela Menashe]

[Excerpt] The Arrow missile was launched from a test field in Israel at 1421 [1221 GMT]; the flight lasted some 42 seconds. Initial data indicates that the missile behaved as planned and attained its goals. During the flight, it entered its trajectory and conducted maneuvers as planned. All of the missile's systems including the sensory device which guides the Arrow to its target, the control systems, the computer, and the engine operated perfectly. At the end of the flight, the missile destroyed itself as planned. No attempt was made to intercept a target in this test. [passage omitted]

Committee To Sign Chemical Weapons Charter

TA2309205492 Jerusalem Government Press Office
in English 1520 GMT 23 Sep 92

[Communicated by the Cabinet Secretariat]

[Text] The ministerial committee for national security convened this morning, (Wednesday), 23.9.92, in Jerusalem, to discuss Israeli participation in the Chemical Weapons Charter. It was decided to accept the recommendation to sign the charter. The signing is to take place at the end of 1992.

Joining the group of the first countries to sign marks the continuation of government policy to advance the peace process.

LIBYA

Government Agrees to Inspection of Installations

LD2709223192 Algiers Radio Algiers Network in Arabic
2200 GMT 27 Sep 92

[Text] Libya today announced its readiness to agree to an inspection by any international body of its installations that are suspected of involvement in manufacturing chemical and biological weapons.

PAKISTAN

Editorial Decries U.S. 'Pressure' on Nuclear Issue

BK2409072492 Islamabad THE MUSLIM in English
23 Sep 92 p 6

[Editorial: "U.S. Knocks Again, New Wave of Pressures?"]

[Text] James Lilley, U.S. assistant secretary of state of defense for International Security Affairs, is visiting Pakistan this week ostensibly for "discussions" with officials of the Pakistan Government. Given the fact that amongst other responsibilities, Lilley deals with the formulation of the American Department of Defense Policies on Nonproliferation, it would seem as if there will be less discussion and more pressurization.

After all, the position of the two governments on the nuclear issue should be clear to at least the government functionaries concerned. For Pakistan, going beyond its offer to participate in a regional nonproliferation arrangement would mean a serious compromise on national security. The Americans for their part find Pakistan an ideal state to "teach a lesson to" over the issue of nuclear proliferation. After all Pakistan is an activist Muslim state with a questionable record on democracy and human rights and all these factors make it acceptable in the eyes of the West, as a target of American interventionism and bullying.

As for the claim that Lilley's visit is part of the ongoing dialogue between the two states on issues of mutual interest, surely it is high time one questioned what the "mutual interest" of the two states is. American interests in the region Pakistan straddles, which have been made abundantly clear, lie in strengthening India a regional actor in South Asia and building a potential defense alliance with the Gulf states to counter Iran's regional role in the Persian Gulf region. This means undermining the politico-military capabilities of both Pakistan and Iran. In addition, America clearly sees the potential of a nuclear weapons capable Pakistan as a threat to its regional interests as well its global policy agenda. Therefore, it has maintained a steady pressure on successive Pakistani governments to compromise Pakistan's nuclear programme. Numerous officials and unofficial channels have been utilised for this purpose—ranging from visits by American civil and military officials to academics and politicians. More critical, military sales

have been suspended, despite the Pakistan government having committed funds for these purchases.

So far, these pressure tactics have failed to elicit a commitment by Pakistan to abandon its nuclear programme and unilaterally sign the NPT [Nuclear Non-Proliferation Treaty]. Yet, the Americans obviously feel that they are getting somewhere with their offensive against Pakistan's nuclear programme. This view is no doubt based upon the commonly held assumption that Pakistan has agreed to two major concessions in relation to its nuclear policy; one, that it will freeze its programme, and two, that it will not export knowledge or technology relating to the nuclear field to Iran.

If this is correct, Americans are justified in assuming that if pressure is continued then gradually they can wear down the Pakistanis to total submission on the nuclear issue. Meanwhile, the Pakistani decision-makers seem to feel it proper to keep tight-lipped on this issue and keep the nation in ignorance. All that this does is to heighten public suspicion on exactly what has been compromised by the Pakistani ruling elites.

The situation is further aggravated when numerous Pakistani delegations go to the U.S. in efforts to seek the resumption of aid. Since details of what transpired on these visits is never revealed to the people—except indirectly through the American press at times—the suspicion of severe compromises having been made is naturally heightened.

In this environment, while there is overtly no harm in continuing a dialogue with the US the Pakistani Government must be clear on its policy objectives and keep the nation informed about the contents of these dialogues. In any event, there has to be some common ground on which dialogue has to be based, unfortunately.

Official Reiterates Nuclear Stand at Vienna Talks

BK2409152892 Islamabad PTV Television Network
in English 1400 GMT 24 Sep 92

[Text] Pakistan has reiterated its firm and unequivocal commitment to nuclear nonproliferation at the global and regional levels. This was stated by the chairman of Pakistan Atomic Energy Commission, Dr. Ashfaq Ahmad, while addressing the 36th regular session of general conference of the International Atomic Energy Agency [IAEA] in Vienna. He said Pakistan is convinced that regional arrangements offer a constructive and (?mutually) reinforcing approach to realize the ideal of nuclear nonproliferation and has been forcefully advocating nuclear-weapon-free zone in South Asia since 1972. Spelling out Pakistan's unwavering stand on the issue of nonproliferation, he referred to last year's prime minister's proposal for a five-nation conference to evolve an agreed arrangement to ensure nuclear nonproliferation in the region. He said Pakistan is also prepared to directly negotiate with India on the nuclear nonproliferation issue.

Advocating improvement in the international safeguards system, Dr. Ashfaq Ahmad emphasized that this should be effected without sacrificing peaceful applications of nuclear technology, which form a vital objective of the IAEA. He said it was equally important to ensure that the future amendments in the safeguards regime was not politically motivated. The IAEA, being an arm of the United Nations, should fully respect sovereignty of all nations regardless of their status, geographic locations, or ethno-cultural designs, he commented. He emphasized that the denial of nuclear technology to certain countries in the name of nonproliferation proved to be completely futile and counterproductive. He stressed that the cause of nonproliferation could be served more effectively through cooperation rather than through embargoes on nuclear technology.

PRC Ambassador Views Joint Nuclear Plant

*BK2509103692 Islamabad THE MUSLIM in English
25 Sep 92 p 1*

[By Mohammad Yasin]

[Excerpts] Islamabad, Sept 24—Zhou Gang, ambassador of the People's Republic of China, said here on Thursday that major joint projects between Pakistan and China like 300 megawatt nuclear power plant and Sandak Copper Mine were proceeding ahead according to schedule.

In an exclusive interview with THE MUSLIM, the Ambassador said that the engineers and technicians from both countries had already started work on the construction of the nuclear plant on the work site.

He said according to the stipulation of the contract, the period for the construction of the plant was 85 months. He expressed the hope that the project would be completed as planned.

The ambassador said in December 1991, the two countries signed the contract for the import of a 300 megawatt nuclear power plant from China. He said the construction of the plant had given an impetus to Sino-Pakistan friendly relations. Pakistani people, he said, would greatly benefit from this project.

Replying to a question about the prospects of further cooperation between the two countries in the fields of defence and space technology, Mr Zhou Gang said in the field of space technology, China and Pakistan cooperated in 1990 in the successful launch of the first Pakistani meteorological satellite. A year later, the two countries signed agreement on cooperation in peaceful utilisation of space science and technology. He said

Sino-Pakistan cooperation in space technology would continue to proceed according to this agreement.

In response to a question about the forthcoming visit to China by Prime Minister Nawaz Sharif, the ambassador said, the Chinese people were looking forward to Premier Nawaz Sharif's visit to China next month. This visit, he said, would surely help raise friendly relations between the two countries to a new level.

Zhou Gang said during Premier Nawaz Sharif's visit to China, the leaders of the two countries would hold wider-ranging and detailed talks on bilateral relations as well as international and regional issues of common interests. He said Pakistan and China would soon sign the Consular Convention as well as an agreement on declaring Beijing and Islamabad twin cities.

In response to a question about China's stand on Kashmir issue he said the dispute over Kashmir was an issue left behind by history. He expressed the hope that the Kashmir issue would be solved peacefully and amicably through talks between Pakistan and India in accordance with some relevant resolutions on Kashmir issue passed by the United Nations and the Simla Agreement.

Asked whether warming up of relations between India and China would affect Sino-Pakistan ties, the ambassador said, the Chinese people would always remain trusted friends of the Pakistani people. The improvement and development of Sino-Indian relations would by no means affect the traditional friendly relations between Pakistan and China. [passage omitted]

In response to a question about U.S. pressure on China not to transfer nuclear technology to the Third World countries while it itself had been selling sophisticated military aircraft to Taiwan, the ambassador said, his country had been consistently pursuing an independent foreign policy of peace, but was opposed to hegemonism and power politics. He said China was ready to work hard with Pakistan and other countries for building a just and equitable new political and economic order. China and other Third World countries, he said, were sovereign states and had the right to cooperate with one another in the field of peaceful utilisation of nuclear energy. He said they do not need others to make captious comments on their cooperation, let alone tolerate the highhanded conduct of "allowing only magistrates set others houses on fire but forbidding ordinary people to even light their own lamps".

He described the U.S. administration's decision to sell F-16s to Taiwan a brazen interference in China's internal affairs, severely damaging Sino-U.S. relations, disrupting and undermining China's great cause of peaceful reunification. He said if the U.S. sticks to its wrong decision, the Chinese side will be compelled to take strong actions.

CENTRAL EURASIA

CIS Nuclear Power Stations Exhibit 'Defects'

LD2709095592 Berlin DDP in German
0801 GMT 27 Sep 92

[Text] Hamburg (DDP)—Half of all the nuclear power stations in operation in the CIS have serious safety defects, according to a report by the Russian Security Ministry. The nuclear power stations in St. Petersburg, Smolensk, and Kursk are particularly dangerous, according to a report by the Hamburg-based BILD newspaper (Saturday's edition), citing the secret study. Even in the less dangerous nuclear power stations the number of accidents has been "relatively high".

The quality of the equipment in the nuclear power stations is bad, the report says, according to BILD. Some of the measuring equipment and electrical plants are of 1950's and 1960's standards. Additionally, preparation of personnel for emergencies is "at a low level". The greatest worry is the fire precaution situation at most of the nuclear power stations. In the report criticism is also made of the fact that the "proposed measures to improve security" which were made after the reactor accident in Chernobyl have still not been put into practice.

Ex-USSR Nuclear Experts Said Working in Iraq

AU2809095792 Hamburg WELT AM SONNTAG
in German 27 Sep 92 p 7

[Report by Heinz Vielain: "Federal Intelligence Service: Nuclear Experts in Iraq, Iran, Egypt"]

[Text] Bonn—About 50 nuclear experts from the successor states of the former Soviet Union are said to be working in Iraq. This is noted in a report by the Federal Intelligence Service (BND) to State Minister Bernd Schmidbauer (Christian Democratic Union), who is responsible in the chancellor's office for coordinating the intelligence services.

In many other cases the BND, which is responsible for reconnaissance abroad, has specific information about the "allegedly successful recruitment" of former Soviet nuclear arms experts by Third World countries. In the report, which has become known to WELT AM SONNTAG, the BND reports in detail to the chancellor's office about the following findings, most of which, however, still have to be finally confirmed:

—Algeria: Several Russians have allegedly been recruited.

—Brazil: The Brazilian Embassy in Moscow is said to have sent personnel files of 60 CIS scientists who are interested in working abroad to Brasilia.

—PRC: At the beginning of 1992 the General Staff of the Chinese Army issued directives for the specific recruiting of nuclear experts.

—India: Four scientists have allegedly applied for jobs.

—Iraq: A total of 50 nuclear experts are reportedly staying in Iraq, including a laser expert from the Russian nuclear arms development center Arzamas-16 and an expert for multiple missile warheads from Ukraine.

—Iran: Since the end of 1991 14 nuclear scientists from CIS states have reportedly been staying in Iran. Work contracts have reportedly been concluded with more than 50 nuclear experts and 200 engineers.

—Israel: It is said that 40 nuclear experts are among the 7,000 scientists who have emigrated to Israel from the former USSR since 1989.

—Libya: Official offers to two Russian nuclear experts have been rejected by them. Several Russians are already working in Libya who are not included in the official cooperation program, however.

The BND also reports that the experts from the former Soviet Union who knew secrets of nuclear technology are mainly Russians. A total of 2,000 to 3,000 of these experts have specialized knowledge about the construction of nuclear weapons. Another 3,000 to 5,000 know how to produce fissionable material (uranium enrichment as well as the production of plutonium and tritium).

The BND report says that the Russian side and also the CIS as a whole keeps giving assurances that no nuclear arms experts have emigrated and no nuclear weapons have disappeared. The laboratories of the former USSR dealing with the development and construction of nuclear weapons are largely located on the territory of the Republic of Russia. A special exception is the former nuclear arms test site at Semipalatinsk in Kazakhstan.

As WELT AM SONNTAG learned from the Bonn Foreign Ministry, officials there increasingly complain about the fact that the aid campaign for supporting former Soviet nuclear experts, which was initiated with the participation of Minister Hans-Dietrich Genscher, is not making faster progress. Already in February this year the establishment of a science and technology center in Russia was agreed upon on an initiative by Germany, Russia, and the United States. The EC has also promised to support the project.

This international facility is supposed to create jobs in civilian research for scientists and engineers, many of whom have slid into poverty after the collapse of the USSR. In addition, it is to make sure that the experts do not move to states that want to acquire nuclear arms.

The Foreign Ministry says that the establishment of the center in Russia is again delayed, in particular also within the EC, because there are disputes about formal issues. Thus, at the moment, the contentious issue is the jargon to be used for the founding document, which now, after an extended quarrel, in particular with the French, is to be written in 11 languages.

U.S. May Stop Uranium Dumping Investigation

OW2809084292 Moscow INTERFAX in English
0709 GMT 28 Sep 92

[Transmitted via KYODO]

[Text] The U.S. Administration is willing to stop its investigation of Russia's dumping uranium exports if Moscow takes measures to put an end to the practice.

CIS companies were selling uranium in America at prices 30-50

[percent] lower than the internationally accepted one of \$30-35 per 1 kg.

According to well-informed sources in the Russian Atomic Energy Ministry, Russia and the United States intend to exercise joint control of uranium exports.

In particular, Russia will have to reduce its uranium exports. The U.S. Department of Commerce will be quarterly establishing the minimum price for Russian uranium.

The Russian Government insists on being informed about the sales of Russian uranium in the United States.

U.S. Protests Planned Nuclear Sub Sale to Iran

LD2609134692 Moscow ITAR-TASS in English
1021 GMT 26 Sep 92

[By ITAR-TASS correspondent Yuriy Kirilchenko]

[Text] New York September 26 TASS—The U.S. Acting Secretary of State Lawrence Eagleburger on Friday criticised the sale by Russia of two commercial nuclear reactors to Iran. Addressing a press conference here on Friday, he said that he tried to persuade the Russian side not to conclude a deal with Tehran, because the latter is supporting terrorism. According to the head of the U.S. foreign department, under given circumstances the U.S. does not consider it worthwhile to sell arms to Iran.

Officially Iran intends to acquire reactors for the production of electric energy for civil purposes. But Eagleburger emphasised that he expressed concern over this deal at the meeting with Russian Foreign Minister Andrey Kozyrev on Thursday, during which this question was discussed along with plans of sales of Russian diesel submarines to Iran.

The U.S. acting secretary of state noted that Washington does not oppose arms trade in general. The U.S. is not opposed to arms sale in each and every case. Eagleburger clarified reminding the planned sale of American fighter planes to Taiwan and Saudi Arabia. But, on the other hand, his country would not have sold submarines to Iran and does not think that others should do it. If other countries wish to sell arms to such states who will use it carefully and rationally, then it will be a different matter for us, he said.

Kozyrev Reiterates Intention

LD2509220392 Moscow Radio Moscow World Service
in English 1810 GMT 25 Sep 92

[Commentary by Viktor Yenzikeyev]

[Text] Russia's Foreign Minister, Andrey Kozyrev, has reiterated Moscow's intention to sell two diesel submarines to Iran. He confirmed that at a meeting with the acting U.S. Secretary of State, Lawrence Eagleburger. Mr. Kozyrev is in New York where he is taking part in the 47th session of the UN General Assembly. Here is a commentary from Viktor Yenzikeyev:

[Yenzikeyev] In recent months Moscow and Washington have often revealed identical views on many world problems. Such coincidence has become so frequent that it has become a target for sarcastic remarks. But in this case there is a different situation. Despite protests from the United States, Russia does not give up plans to sell two diesel submarines to Iran.

Informing his American counterpart about this, Mr. Kozyrev refuted U.S. allegations that the deal could destabilize the situation in the Middle East. More than that, as Mr. Kozyrev remarked, Moscow would further continue to export military hardware to earn foreign exchange essential for market reforms. The French news agency recalls in this connection that earlier Russia announced its plans to sell two small nuclear reactors to Iran to be used exclusively in peaceful purposes.

U.S. arguments about a possible imbalance in the Persian Gulf because of the purchase of two Russian submarines by Tehran can mislead on credulous people [as heard]. On a closer look at the problem it is easy to see that its cause lies somewhere else.

We may recall Washington's turbulent reaction to Moscow's decision to sell cryogenic engines to India, although virtually all experts admitted that the engines could not possibly be used in military purposes.

Then Washington stiffly refused to buy Russian plutonium despite an affordable price and the desire of American businessmen to buy plutonium in Russia. Afterwards the time came when it seemed that the ice has melted [as heard] and administration officials announced with gentle smiles on their faces their decision to change the initial position. According to Washington officials that was then above all in view of the difficulties facing Russia's economy, which the United States would like to help.

There certainly is only a grain of truth in these words. But it deserves gratitude as it is. During their current stay in Washington, none of the two Russian vice premiers, neither Shokhin nor Shumeyko, has been received by the U.S. treasury secretary, however, although a deal on plutonium was to be discussed at the planned meeting. We may also recall that there have been considerable obstacles to the export to the United States of

Russian space industry products, in which American scientists are so much interested.

These and many other examples confirm the correctness of the External Affairs Minister [as heard], Petr Aven, who declared in New York recently that the United States allows Russian goods to enter its internal market with reluctance and hinders this process in every way. We may add that it allows Russian goods to the international market with reluctance also. This concerns military and civilian products alike.

As you can see, there is a paradoxical situation [as heard]. On the one hand, the United States helps market reforms in Russia. On the other, it blocks them in every way. Such a Washington stand creates additional difficulties for Boris Yeltsin and his team of reformers containing with difficulty the mounting pro-communist opposition shouting at every corner that the West is cheating and betraying us.

Concern for Stability Underlined

LD2509022792 Moscow ITAR-TASS World Service
in Russian 0050 GMT 25 Sep 92

[By ITAR-TASS correspondent Igor Ignatyev]

[Text] New York, 25 Sep—"Unfortunately, I have not seen today's newspapers and cannot comment on claims about the sale of submarines to Iran," Russian Foreign Minister Andrei Kozyrev diplomatically replied when he was asked to comment on a NEW YORK TIMES report after a speech at Columbia University on 23 September.

Speaking in abstract terms about these reports, he continued: "I can say that we do indeed sell certain weapons to foreign countries, but we carry these sales out within the framework of demands to maintain stability." Russia, the minister said, "needs to maintain contacts with Iran and certain other countries."

Answering questions on this subject at an earlier news conference after talks with acting U.S. Secretary of State Lawrence Eagleburger, the Russian minister said: "Our expert assessment shows that these deliveries do not exceed levels which could destabilize the situation in the region." A. Kozyrev also declared that there exists "a quite clear need to provide sales markets" for Russia's competitive export production to support the reform process.

Acting Secretary of State L. Eagleburger noted that the United States adheres to "a different position" on this question. It is after all basically the United States which remains the major world arms dealer. Recently, the AP agency recalls, President Bush approved two deals with a total value of \$15 billion for the delivery of up to 150 F-16 fighters to Taiwan and 72 F-15 fighters to Saudi Arabia.

Details Not Disclosed

LD2509110092 Moscow ITAR-TASS in English
1042 GMT 25 Sep 92

[By ITAR-TASS correspondents Andreiy Naryshkin and Leonid Timofeyev]

[Text] Moscow September 25 TASS—"In connection with certain difficulties in settlements between Russia and Iran for the deliveries of special equipment, armaments and hardware, the question of selling Russian diesel submarines to Teheran does not stand on the agenda," ITAR-TASS was told by deputy chief of the main directorate for military-technological cooperation of the ministry for foreign economic relations, Vladimir Pakhomov.

The interview was prompted by a statement by acting U.S. Secretary of State Lawrence Eagleburger who on Thursday expressed anxiety over Russia's plans to sell two to three diesel submarines to Iran. Such a step, he said, could create a new threat in the Gulf zone where the navies of the U.S. and other countries are permanently present.

Commenting on Eagleburger's statement, the Russian foreign ministry confirmed the fact of military cooperation between Russia and Iran, the details of which are not divulged for commercial and other considerations, as all other arms merchants do throughout the world. Head of the Iran department at the Russian foreign ministry Maxim Peshkov said, particularly, that Washington had expressed concern about Russian-Iranian deals in this field in the past as well. He emphasized, such an anxiety is due not to political motives, however, but to U.S. desire to return to the Iranian arms market which they controlled under the old regime. Incidentally, the Iranian Army is still armed with American aircraft and other equipment.

The Russian diplomat added that in maintaining such cooperation with Iran, Moscow proceeds from the principle of non-violation of the alignment of forces in the region and supplies to Iran only defensive weapons. Similar answers were given on many occasions to the American side and other western countries.

As for the arms trade in general, according to Peshkov, this business is profitable and Russia cannot give up this source of revenue at this moment.

U.S. Considering Joint GPALS Development

MK2409120192 Moscow NEZAVISIMAYA GAZETA
in Russian 23 Sep 92 p 2

[Commentary by Maksim Tarasenko under the "Opinion" rubric: "SDI—Anti-SDI. Global Protection or a Big Nothing?"]

[Text] Six months have already elapsed since Russian President Boris Yeltsin called on the United States to jointly develop an antimissile defense system (in place of

the Strategic Defense Initiative), thus effecting a virtual 180-degree turn in our official attitude toward the "star wars" program.

At the Russian-American top-level meeting in June the sides signed a memorandum of agreement (to elaborate jointly with allies and other interested states a concept for a global system of protection against a limited ballistic missile strike).

A working meeting between representatives of the U.S. and Russian space departments was held 10-11 June in Washington, half of which was devoted to a discussion of the prospects of military cooperation in space. Another meeting was held in Moscow in mid-July, in which, on the American side, the U.S. assistant secretary of the Air Force for space issues participated alongside the director of NASA. Need it be said that it did not prove possible to obtain any details on the content and results of these meetings? The central press did not even make any mention of the meetings themselves.

It is not hard to predict the concept of future military-space cooperation which can be elaborated by the inventors' collectives that have been working for 10 years on the American SDI and the Soviet "asymmetric response."

But maybe now, following the end of the cold war, we really need to change our attitude toward SDI, particularly since we are no longer talking about its original concept but about a so-called system of "global protection against limited strikes" [GPALS]?

First of all, it must be specified that the new concept—GPALS—is utterly different from the old SDI.

The aim of SDI was to create an impenetrable shield against a massive missile strike by the USSR. In eight years of work even the program's most ardent supporters saw the technical impossibility of creating such a system. When, as a result of the detente in Soviet-U.S. relations and the first steps toward the reduction of nuclear arsenals, the threat of a Soviet strike started to recede rapidly, the Americans were left with the choice of either finding another, more modest aim for the program, or scrapping it.

A suitable aim was obligingly suggested by Saddam Husayn. Future ABM defense systems' specifications and performance characteristics which now appear attainable could in principle ensure the repulsing of a third-country strike by a force of up to 200 warheads.

But even if you agree that a system for protection against a limited strike is technically possible, does this mean that its creation will really enhance the world community's security?

While alluding to threats on the part of third countries, it is relevant to recall that the aggression of many of them over a period of decades was stimulated, or at least materially supported, by the rival superpowers. If the confrontation between the United States and the former

USSR is really replaced by cooperation, only a madman would risk challenging the world community, irrespective of whether or not he has an ABM defense system.

As for mad dictators, who are essentially the reason why it is being proposed that the system be constructed, it would not be a bad idea to look at the system beforehand from the viewpoint of those against whom we are planning to protect ourselves.

The creation by Russia and the United States of a joint system of ABM defense against third countries will only intensify our former allies' feeling that they have been betrayed and have been left "within a circle of enemies" (Cuba, North Korea). A feeling of doom rarely helps you think rationally.

It is clear that when the two leading nuclear powers start creating a system that devalues the nuclear arsenals of third countries, these countries—which quite sincerely consider a superior opponent (Israel, India)—will start looking for ways of overcoming ABM systems.

This path had already been found and taken by the USSR and the United States at the end of the 1960's—building up the number of missiles, developing multiple reentry vehicles, installing decoy targets. Thus begins the endless race of defensive and offensive systems. The USSR and U.S. leaderships of the time were able to realize this and agree on restricting ABM defense systems. Renewing just such a race at the level of superpowers—third-world nuclear countries will scarcely prove less destabilizing and destructive.

This circumstance provides us with another reason for retaining the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems (1972). The ABM Treaty directly prohibits the development, testing, and deployment of ABM systems of any basing mode which ensure the protection of a country's whole territory.

Since the treaty is bilateral, it can be abrogated with the mutual agreement of the sides. But even if you allow that the improvement in Russian-American relations is already so profound and irreversible that the ABM Treaty has lost its direct significance in restricting the arms race between the two superpowers, it is expedient to retain it as an effective example of the leading nuclear powers' desire for disarmament and an object lesson for the campaign to prevent a similar race at the emergent new line of North-South confrontation.

For defense against the currently existing missile threats, however, it would be quite sufficient to create a system of regional defense against tactical missiles as well as a global early warning system. This would provide "a morsel" for the defense sectors and would not contravene the ABM Treaty, sparing the United States and Russia from any suspicion of a conspiracy against the Third World.

The deterrence of a missile threat on the part of third countries should be sought not by trying to make their missile weapons "powerless and obsolete" (which is what Reagan wanted to do with Soviet missile weapons), but by extending and improving the international regime for monitoring [kontrol za] missile technology and, naturally, by taking every possible political step to normalize international relations. Remember, the end of the cold war was initiated not by Reagan's "position of strength" but by Gorbachev's "new political thinking."

The missile technology monitoring regime must be significantly improved and transformed from the purely prohibitive CoCom rules to a genuinely international regime which, like the International Atomic Energy Agency's nuclear technology regime, would promote the development of peaceful missile technology under effective international control.

As yet the proposals on joint work to create a global protection system, as academician Yevgeniy Velikhov and First Deputy Defense Minister Andrey Kokoshin have noted, "have met with practically no objections either among designers or among scientists," however. This is not surprising, because all the relevant designers were working on "our answer to SDI" and practically all prestigious scientists in the relevant spheres have made their contribution by working on economic contracts. Now that state budget financing is drying up, it is not criticism of the American program that will promise material support, but the continuation of the previous work together with our former adversaries.

But the fact that the undoubtedly important problem of the survival of our missile-space industry today may not be so close to the taxpayer's heart is no reason to palm off on him in exchange a hypothetical protection against a presumed threat.

U.S. Stance on Iran-China Nuclear Pact Chided

*NC1709211692 Moscow Radio Moscow in Persian
1330 GMT 15 Sep 92*

[Commentary by Sergey Viktorov]

[Text] Iran has described the U.S. State Department warning on the conclusion of an agreement between China and Iran on cooperation in nuclear technology as haughty. As pointed out by the TEHRAN TIMES, the agreement, which was signed last Thursday during the visit by Iranian President 'Ali Akbar Hashemi-Rafsanjani to the PRC, concerns the use of nuclear energy solely for peaceful purposes. The newspaper writes: The United States does not have the right to prevent the implementation of this agreement. We would like to note that last Friday, U.S. State Department spokesman Richard Boucher had said that the China-Iran agreement facilitates the production of nuclear arms for Iran. Radio Moscow analyst Sergey Viktorov writes on this:

What can be said? The U.S. State Department spokesman's accusation of Iran of trying to manufacture nuclear arms through cooperation with other countries is a serious accusation. But in order to lend some weight to this accusation in the world community, the existence of signs as serious as the accusation is necessary. As far as we know, there are no such signs yet. Since there are no such signs, one should believe that Iran's nuclear program and its cooperation with other countries in this field is truly peaceful in nature. Tehran, too, is constantly stressing this, especially when contrary to some other countries, namely Iraq and North Korea, Iran has always shown interest in cooperating with the International Atomic Energy Agency [IAEA], which is the most competent international organization in this field. I recall how this agency's delegation inspected Iran's nuclear installations and did not find any signs that Iran is implementing a nuclear program for military purposes.

Of course, the U.S. State Department statement on the Iran-China nuclear agreement should be considered as a new manifestation of the overt hostility that has characterized Tehran-Washington relations for many years. In Washington they clearly do not take into consideration the fact that such ordinary political attempts within the framework of U.S. anti-Iranian stance is also related to the interests of other countries which, in this case, is China.

Russia, too, has signed an agreement with Iran on the installation of a nuclear power plant near the Iranian capital, however. In this agreement the non-military nature of this cooperation is clearly stated. By accusing Iran of trying to acquire nuclear arms through such cooperation, the United States is also indirectly accusing Russia and China—two other members of the UN Security Council—for conniving at the trampling of the pact on the nonproliferation of nuclear arms. This is unjust, since both Moscow and Beijing will not give in to [word indistinct] in the nature of their transactions with Tehran on nuclear technology, since in view of the credibility of these two UN Security Council members, international security is more important for them.

Now that Russia and China do not see anything reproachful in their nuclear cooperation with Iran, this type of cooperation can continue until the time when the IAEA—the recognized international authority on these affairs—says no.

Russia Assesses U.S. Nuclear Testing Position

*LD2409155192 Moscow Radio Moscow World Service
in English 1429 GMT 24 Sep 92*

[Commentary by Yuriy Solton]

[Text] The United States has hastened to complete the programme of nuclear tests planned for the 1992 fiscal year ending on 30th September. The Nevada testing ground has seen two underground nuclear blasts over the past six days. The administration has turned a deaf ear to

the US Congress's calls to introduce a nuclear moratorium for a term of between nine to 12 months and terminate nuclear explosions by 1996.

Neither the Energy Department, responsible for the programme, nor the Pentagon itself notified the Congress, even preliminarily, as has usually been the practice before. Administration officials allege that the United States needs nuclear testing to check the safety, reliability and effectiveness of nuclear weapons but that is, of course, only part of the truth. Military experts have calculated that after the American atomic bombardment of Hiroshima and Nagasaki in 1945, the nuclear powers have staged more than 1,900 tests with some 85 percent of all the nuclear explosions planned to perfect nuclear forces. Even today, the Pentagon admits that the blasts in Nevada are not essential to develop more sophisticated nuclear weapons but such a programme hardly matches the process underway in the United States and Russia to slash their nuclear arsenals. It also undermines the nuclear non-proliferation regime; one of the most pressing problems today.

The new varieties of nuclear warheads being designed cost less and are simpler to produce and handle. But there is yet another factor to consider. The continuation of American nuclear tests may trigger off a chain reaction. When China exploded its nuclear device last summer it immediately declared that it favoured the total termination of nuclear testing. France has joined Russia's nuclear moratorium, the terms of which expire on 1st October, however.

Russia's leadership has received quite a few requests from public activists in independent Commonwealth and other countries to continue the nuclear moratorium. Not long ago, such an appeal was addressed to it and to the US administration by eminent scientists and politicians from the 50 countries participating in the Pugwash Conference. Moscow is ready to favourably respond to these appeals, provided the other nuclear club members do the same. But in Russia there is an influential group amongst the military, politicians and scientists, who argue that such a long pause in testing, two years now, when other countries have continued tests and that consequently Russia's government has put its national security seriously at risk [sentence as heard].

It cannot be ruled out that a decision to resume nuclear explosions will be adopted. The fate of a total nuclear test ban, which Moscow and the overwhelming majority of other UN member countries have advocated for so long, will much depend on whether Washington and London change their positions or not.

Russian Official Opposes Changing N-Missile System

LD2509113392 Moscow *ITAR-TASS World Service* in Russian 2216 GMT 23 Sep 92

[Text] Moscow, 24 Sep (ITAR-TASS)—Academician Vladislav Repin of the Russian Academy has fierce

objections to recent theories regarding possible—even desirable—qualitative changes to Russia's nuclear missile deterrence concept and structure. Until 1988 Vladislav Repin was general designer of the program developing the missile early warning and space monitoring system.

In his words, "we are talking about a proposal ostentatiously and in practice to exclude from Russia's defense policy the concept of the retaliatory-counterstroke strike launched on discovery of a missile attack and leaving as the sole option for retaliation a counter-strike following a hit by the enemy's missiles and elucidation of the damage done."

Adopting a counter-strike option only, Repin believes, is tantamount in its military consequences to adopting the concept of unilateral nuclear missile disarmament. Adopting that position for economic reasons is the worst option for implementation of this concept. "For ailing and impecunious Russia, virtually stripped of combat-ready conventional armed forces and unable to even carry out the evacuation of the embassy in Kabul without losses, it is utterly wasteful to blindly follow the old declaration of non-first use of nuclear weapons and would probably be more advisable to follow the U.S., French, or British examples, which have never undertaken such worthless obligations enabling the latter two countries, which have relatively few nuclear and conventional armed forces, to have great potential for deterrence," Repin concludes.

Russian Plans for CW, BW Destruction Detailed

PM2509093792 Moscow *IZVESTIYA* in Russian 23 Sep 92 Morning Edition p 2

[Article by Viktor Litovkin: "Destruction of Chemical Weapons Could Make Russia Rich"]

[Text] Preparations have been completed for stage one of the program to destroy chemical weapons in Russia. It will be discussed at a government session and at the Supreme Soviet.

The total cost of the program will be 3,334 million rubles [R] in 1991 prices. It was devised by the Committee on Chemical and Biological Weapons Convention Problems under the Russian president, the Academy of Sciences, the ministries of defense, security, economics, industry, finance, ecology, and communications, and other interested departments.

At stage one the plan is to make three facilities fully operational. They will destroy 45 percent of all Russian chemical agents. That is 7,000 tonnes of lewisite, mustard gas, and lewisite-mustard gas mixture, some of which the country has been storing ever since World War I and which are to be found in the settlement of Gornyy, Saratov Oblast, and also in the city of Kambarka, Udmurt Republic. Moreover, at one of the plants, a former producer of chemical weapons, the destruction of 3.5 million projectiles will be organized.

How will it be done? The concept elaborated by academicians A. Kuntsevich, O. Nefedov, Zh. Alferov, G. Devyatykh, and other eminent scientists demands that lewisite be regarded as a national raw material resource and that it be processed into a raw material of strategic value to microelectronics—extremely pure arsenic. The kind that could be used for home production and for sale on the world market. The price of it there hovers around \$2,000 per kg.

The Russian State Scientific Research Institute of Chemical Technology (formerly GSNIIOKhT) has taken the lead in the open competition for the best lewisite processing technology. It offered the most effective and safest, "wet" method of preliminary neutralization of lewisite with an alkali, and subsequent electrolysis of the reaction products. This method gives off no gas, there are no furnaces involved, and nothing is burned. There is practically no effect on the environment.

In second, third, and fourth places you have the techniques proposed by the branch of the Karpov Physical Chemistry Institute in Obninsk, a scientific research institute in Nizhny Novgorod, and the Institute of Chemical Technology again, which devised, as a second option, a method of chlorinating lewisite.

The competition for the best technique continues. Scientists and industrialists from other states can participate. The results were recently discussed by a Russian scientists' conference at the Academy of Sciences Institute of Chemical Physics, and a similar international conference is planned for next year.

"The Russian-American agreement states that our experts will examine all the proposals, irrespective of state or national origin," academician Anatoliy Kuntsevich, chairman of the concept committee, said.

The intention is to pay the winners in rubles and hard currency. They will be selected with the participation of the population, the public and authorities of the places where it is proposed to construct the chemical agent processing facilities. They will have guaranteed access to all the materials and documents and an equal vote when approving the final decision. Incidentally, there is a provision whereby regional business people and working people at the enterprises involved in destroying chemical weapons will receive a share of the profits from the processing of them.

The mustard gas is also to be processed, after detoxification, into reaction products which can be used, for example, in the rubber industry, to accelerate the vulcanization of rubber. Corrosion-resistant, fireproof compounds to treat cross ties and timber and antiseptic liquids will be obtained from organophosphorus agents (sarin, soman, V gases).

But, the most important thing, set out perhaps for the first time on such a scale in the program, is its social orientation. Some 13-15 percent of all the sums will be

spent on infrastructure development, housing construction, health services, and social benefits for the residents of the places where it is proposed to site the chemical agent destruction facilities.

For example, at stage one, in Kambarka, it is planned to put an inverted siphon through the pond, construct purification installations, a water main from the city center to the military quarters, and reservoirs to supply the residents of the lower, fenced-off part of the city with water. A road will be built to Chaykovskiy and housing, a boilerhouse, and an electricity substation will be constructed.... This is scheduled to cost R385 million.

Provision of social amenities will begin well before the processing facilities are constructed and it will be a priority task. The program coordinators reckon that the population will derive real benefit from this process and will be the convention committee's allies, actively cooperating with it.

In juridical terms, stage one of the destruction of the chemical agents begins on 1 April 1993. It is then that the ecological evaluation begins, along with the feasibility study of projects, manufacture and testing of pilot facilities, refinement of them, testing of technology, and training of specialists. The plants will not start up until 30 June 1997.

They have to be ecologically safe and highly efficient in economic terms. It will mark the start of the return of Russian money squandered on the ruinous and senseless arms race.

Russian Draft Law on Nuclear Waste Approved

PM2909153792 Moscow ROSSIYSKAYA GAZETA
in Russian 18 Sep 92 First Edition p 2

[Unattributed report: "Radiation Within the Law"]

[Text] The law "On State Policy in the Sphere of Handling Radioactive Waste" will be the first blow intended to breach the vacuum in the use of nuclear energy. In the White House yesterday there were joint hearings on the draft law, which is currently being evaluated in parliamentary committees and commissions and is expected to be submitted for examination by the fifth session of the Supreme Soviet in October, in fact.

Yevgeniy Nesterov, physicist, member of the Supreme Soviet, and chairman of the working group to prepare the draft law, noted that the general economic crisis is dominated by the radiation component. The scientist pointed out that for many years the Soviet leadership tackled defense tasks and economic development problems without giving much thought to people's safety and health. "Even now there are no signs of any fundamental advances in this policy and nuclear energy complex enterprises are continuing to operate in the old way," the deputy said. According to him, the Russian Nuclear Energy Ministry is not particularly concerned about

restructuring the enterprises of the military-industrial complex and it remains a monopolist, not allowing any alternative market structures to develop. The scientist stressed that the country will continue to face the threat of further Chernobyls as long as there is no nuclear law blueprint and no law on the use of nuclear energy.

The draft law "On State Policy in the Sphere of Handling Radioactive Waste" was given a high rating during the hearings. This is not surprising when you consider that American specialists were closely involved in its preparation.

Conflict Over Ukraine's Nuclear Status

CIS Criticizes Decision

OW2609195692 Moscow INTERFAX in English
1912 GMT 26 Sep 92

[Transmitted via KYODO]

[Text] Kazakh President Nursultan Nazarbayev and the commander-in-chief of the CIS Joint Armed Forces, Marshal Yevgeniy Shaposhnikov, have had a meeting in Moscow today, discussing the events in Tajikistan, Georgia, Armenia, and Azerbaijan, as well as the progress of the preparation work for the October 9 CIS summit in Bishkek.

They also discussed Ukraine's recent statement to the effect that it wishes to remain a nuclear power, a desire which, as Nazarbayev told our special correspondent Vyacheslav Terekhov in an exclusive interview, "contradicts earlier statements made by the leaders of that republic." "They said more than once that they wanted Ukraine to become a nuclear-free state as soon as possible. We need more clarity on the issue," Nazarbayev said.

Shaposhnikov expressed the hope that the constructive position of Kazakhstan, Russia, and Belarus on strategic nuclear armaments will make the Ukrainian leaders question their decision. "Ukraine should not say one thing today and another tomorrow. Neither we nor the rest of the world can understand this," the marshal said.

He said he had sent telegrams to the presidents of Azerbaijan and Armenia inviting them to request the CIS Council of Heads of State to send peace-keeping forces to Nagorno-Karabakh. Such a request would be granted, he said.

Ukraine Reaffirms Nuclear-Free Policy

OW2809234492 Moscow INTERFAX in English
2107 GMT 28 Sep 92

[Transmitted via KYODO]

[Text] The Ukrainian presidential spokesman, Vladimir Shlyaposhnikov, has said that neither Leonid Kravchuk,

nor other republican leaders have made official statements hinting it may reconsider its intention to eventually become free of nuclear weapons. This course is unchanged, and this means that Ukraine will stick to its nuclear disarmament commitments, Vladimir Shlyaposhnikov told journalists in Kiev.

In turn, the Ukrainian Defence Ministry press service has confirmed that "the republic's nuclear policy remains the same". The press service issued a statement saying that strategic weapons would be withdrawn from Ukraine and scrapped within seven years, which fully agrees with the international agreements to which Ukraine is a signatory".

Ministry Denies Changing Policy

LD2809203192 Moscow ITAR-TASS in English
1934 GMT 28 Sep 92

[By UKRINFORM-TASS correspondent Nikolay Zayka]

[Text] Kiev September 28 TASS—"The position of Ukraine regarding its aspiration to become a nuclear-free state remains unchangeable. The strategic nuclear weapons will be removed from the Ukrainian territory and destroyed within seven years, which fully corresponds to international agreements and Ukraine's commitments," according to a statement released here by the press service of the Ukrainian Defense Ministry.

Until the last rocket is destroyed, Ukraine whose armed forces are not included in the composition of the Commonwealth Unified Armed Forces, will retain its membership in the Command of Commonwealth Strategic Forces to which all strategic forces stationed on the Ukrainian territory are subordinated. The Ukrainian Defense Ministry exercises an administrative control over all strategic forces located on the Ukrainian territory, which is a reliable guarantee of their non-use.

This statement of the Ukrainian Defense Ministry denies reports that appeared in some news media saying Nursultan Nazarbayev, president of Kazakhstan, allegedly condemned "statements by Ukrainian leaders" on maintaining the status of a nuclear power.

Backtracking Evokes Concern

PM2909085392 Moscow KRASNAYA ZVEZDA
in Russian 25 Sep 92 p 3

[Report by Gennadiy Kostin: "Where Certain Senior Figures Are Taking Ukraine"]

[Text] The 1 June 1968 nuclear nonproliferation treaty is a highly important international document. In accordance with this treaty any increase in the number of states with nuclear weapons is seen as, to put it mildly, an extremely undesirable and simply inadmissible factor undermining stability in the world.

In accordance with this obvious logic the states that were previously part of the USSR reached the decision that only Russia is to retain the right to have the former Soviet Union's nuclear weapons. Thus they are not allowing the 1968 treaty to be undermined.

Today all tactical nuclear weapons have already been concentrated on Russian territory. The Russian Defense Ministry and Russian industry have been made responsible for the maintenance and storage of and necessary cuts in this arsenal.

The strategic nuclear weapons situation is more complex. They are still sited on the territory of four states—Russia, Kazakhstan, Belarus, and Ukraine. It is not that easy to redeploy strategic nuclear arms, and they include not only nuclear warheads, but also delivery vehicles. Ground-launched strategic nuclear missiles involve a ramified infrastructure—launch silos, command posts, technical servicing bases, and so on. There is a similar situation with regard to strategic heavy bombers limited by the START treaty signed in Moscow last summer.

In view of these circumstances the CIS countries concluded 30 December 1991 the Minsk Strategic Forces Agreement, which envisages the procedure and timetable for the disassembly [razukomplektovaniye] of these weapons, including those now in Ukraine, by the end of 1994. The Lisbon protocol of 23 May 1992 signed by the four CIS countries (on whose territory the former USSR's strategic nuclear weapons are sited) and the United States confirms the nuclear-free status of Belarus, Kazakhstan, and Ukraine and underlines these three states' commitments to officially subscribe to the nuclear nonproliferation treaty within the "shortest possible period" in line with their constitutional practice.

It is quite obvious that these states should juridically accede to the nonproliferation treaty before the START Treaty comes into force. Without this its ratification cannot effectively be considered complete. But none of the aforementioned states has hitherto formalized its nuclear-free status. What is more, the West is starting to become seriously alarmed by Ukraine's intentions.

What am I referring to? According to REUTER, V. Tolubko and Yu. Kostenko, members of the Ukrainian Supreme Soviet Committee for Defense Questions who were recently in Washington, said that "Ukraine will not necessarily comply with the dates and commitments enshrined in the Lisbon protocol." According to the agency, that approach from Ukraine may herald serious problems for the START Treaty.

These Ukrainian parliamentarians claimed that Ukraine may not hand over to Russia for destruction the strategic missiles there. When the U.S. State Department's official spokesman was asked to comment on this statement, he replied: "In my opinion, the crux of the matter is that we all agreed with the START Treaty and other accords surrounding it. We consider them important and we must all stick to them."

It is amazing that there are senior officials in Ukraine who want to condemn their own country to a "status of disrespect" in the world community, not to mention possible economic and political isolation of the country such as perhaps only Iraq has experienced today.

Kravchuk Stresses Control

*OW3009155592 Moscow INTERFAX in English
1447 GMT 30 Sep 92*

[Transmitted via KYODO]

[Text] Speaking at the parliament session today, Ukrainian President Leonid Kravchuk said Ukraine needs a union of constructive forces which could take the lead in the work of strengthening the independent country. In his opinion, the multiparty system in Ukraine is still very imperfect but an election based on it could lead the society "unprepared for political storms" to "numerous conflicts." For this reason he opposes holding a referendum on the dissolution of the present parliament.

Kravchuk thinks the political situation in Ukraine can be mainly stabilized by round-table discussions involving all parties and movements, a law on elections based on a multiparty system, and serious amendments to the legislation on public associations.

The propaganda of nationalism and chauvinism and the fanning up of anti-Russian sentiments must be stopped, he insisted.

In order to stabilize the economy, Ukraine should leave the ruble zone, the state should strengthen its influence in its sector of the economy, and foreign economic relations should be liberalized.

The strengthening of state influence on the economy means the state should "support economic methods rather than give orders," however. Going over to foreign policy matters, Kravchuk said, "Ukraine does not want to keep its fingers on the nuclear button, but it should give the world community guarantees that the nuclear weapons stationed on its territory will not be used by a third state." Today, he said, this is within the Ukrainian President's control. Ukraine still seeks to become a nuclear-free state, however.

Kravchuk disagreed with the view that CIS summits are useless but said Ukraine "will not recognize the supremacy of any central CIS bodies the creation of which is at present being insistently proposed."

Morozov Says Ukraine Controls Nuclear Armaments

*LD0210194692 Moscow ITAR-TASS in English
1753 GMT 2 Oct 92*

[By UKRINFORM correspondent Sergey Balykov—TASS]

[Text] Kiev October 2 TASS—Former Soviet strategic nuclear armaments deployed on the Ukrainian territory are controlled by Ukraine and their use from the territory of the republic is excluded, Ukrainian Defence Minister Konstantin Morozov told reporters on Friday.

The draft of the military doctrine of Ukraine submitted to parliament is exclusively of a defensive character, the minister said.

The main principles of the doctrine is that Ukraine has no territorial claims to any other state, refrains from use of force in solving disputes and maintains good-neighbourly relations with other states.

The minister said that military districts in the republic were transformed into two commands, the reduction of conventional armed force was initiated, control over weapons and other military property was strengthened.

Morozov informed that illegal sales of the property of the Black Sea Fleet are going on. An ammunition dump, several logistic support ships, a number of military objects and the land they occupy were sold without a permission from the Ukrainian Defence Ministry. He did not disclose who sold the property and who bought it, but added that oil, food and clothes are also illegally sold.

Morozov said his ministry asked the office of the Ukrainian Procurator General to investigate the deals.

Ukraine Nuclear Power Plants See Stoppages

AU2909180392 Kiev HOLOS UKRAYINY in Ukrainian 23 Sep 92 p 8

[Information issued by the Public Relations Service of Ukraine's State Atomic Supervision Committee: "Two Times Two Equals Zero"]

[Text] During August, seven out of Ukraine's 15 atomic energy stations were in operation and eight—under repairs. The radiation situation at all the atomic energy stations remained within the norms.

Twice, the automatic safeguard system halted the energy units at the Zaporizhzhya and Rivne atomic energy stations. On both occasions, the stoppages were due to the automatic disconnection of the generator, and, according to the international scale of assessment of events at atomic energy stations, they were at level zero.

Nor did two other unscheduled stoppages—of the second unit of the Zaporizhzhya and of the second unit of the South Ukrainian atomic energy stations—affect the safety of the stations, and they were classified as being outside the range of assessment. The first stoppage was dictated by the need to carry out minor repairs to the reactor's auxiliary piping; the second stoppage was due to the August heat wave, as a result of which the cooling water in the reservoir became too warm.

Repairs are still under way at the first and third units of the Chernobyl Atomic Electric Power Plant and the replacement of worn-out units is also continuing. The third unit is being prepared for removal from service.

Ukraine Approves Nuclear, Radiation Safety

AU3009194292 Kiev HOLOS UKRAYINY in Ukrainian 23 Sep 92 p 8

[Article by Mykola Oleksandrovykh Shteynberg, chairman of the State Atomic Supervision Committee: "Security Is Most Important"]

[Text] Recently, Ukraine's Cabinet of Ministers approved regulations on creating Ukraine's State Committee for Nuclear and Radiation Safety. Mykola Oleksandrovykh Shteynberg, chairman of the State Atomic Supervision Committee, is telling about the committee's main tasks and trends.

Our main concern is to guarantee the protection of the population and environment from the effect of ionizing radiation. We are implementing the state policy in this sphere by controlling the safety of the utilization of nuclear and radiation technologies, transportation and storage of nuclear materials and radioactive substances, and disposal of nuclear waste.

Of no lesser significance is the state control of nuclear materials, certification of the quality of equipment and products that are being supplied to atomic power engineering facilities, and organization of radiation monitoring. The committee, as a supervising body, will elaborate criteria, norms, and rules of nuclear and radiation safety and will control their fulfillment by enterprises, institutions, and organizations with all types of ownership and by individual citizens.

We started our work in conditions when the normative-legal base just started developing, and this greatly complicates practical resolution of many questions involved in the regulation activity. It is therefore very important to adopt, as soon as possible, Ukraine's law on the utilization of atomic energy and protection from radiation. We sent a draft of this law to leading foreign specialists and requested their expert opinion on it.

The Main State Inspection on the Supervision Over Nuclear and Radiation Safety that works under the committee is in charge of monitoring the exploitation of nuclear electric power plants. In the near future, we must take under our control the work of other atomic energy facilities: various instruments, equipment, industries, enterprises, storehouses, and depositories of nuclear materials, and vehicles that are being used for transporting them. To do this, we are elaborating new methodological approaches and concepts and establishing direct ties with local administrations.

The committee coordinates work on reassessing the level of safety of the nuclear facilities operating in Ukraine, while taking into account the requirements of the International

Atomic Energy Agency. We also rely upon the assistance and practical experience of those countries that possess developed nuclear technology. The thing is that, today, it is quite difficult to achieve high reliability of atomic power engineering without their financial and technical assistance and without extensive international cooperation. We have established fruitful contacts with the Institute for Protection and Nuclear Safety in the French Commissariat for Atomic Energy, with the German Society for the Safety of Nuclear Reactors, and with other specialized international and foreign organizations. They take part in assessing the safety of the "Ukrytya" [Shelter] facility, in checking the reliability of systems for locating accidents at atomic plants, and in providing expert opinion on the draft projects for closing down the Chernobyl Atomic Electric Power Plant. They also provide assistance in retraining specialists.

Recently, an analytical mission of the group that is in charge of administering assistance in the sphere of nuclear regulation visited Kiev. This group is a working body of the Commission of European Associations that elaborates projects for financial and technological assistance to countries of Central and Eastern Europe, and also to Russia, Ukraine, Lithuania, and Belarus in raising their nuclear safety. An agreement has been reached on providing the State Atomic Supervision Committee with means of telecommunication, computers, mobile laboratories for radiation control, and so on.

A provisional cooperation agreement was also signed with the U.S. Nuclear Regulation Commission.

I believe that we would have made a great mistake if we had restricted our activity to exclusively departmental frameworks. In conformity with the regulations adopted on the Committee for Nuclear and Radiation Safety, we will organize a State Interdepartmental Council for Questions of Safe Utilization of Nuclear Energy and Radiation Technologies. It will include scientists and specialists who deal with problems of human health protection, environmental protection, nuclear and radiation safety, regulations in this sphere, and so on.

The future of atomic power engineering in our country is largely dependent not only upon its technological possibilities, the level of safety, or the economic efficiency, but also upon public attitude toward it. To provide, on a regular basis, information for the population on the situation in the sphere of nuclear and radiation safety, the State Atomic Supervision Committee will publish official bulletins that will shed light on the events at the national nuclear electric power plants. In the course of time, we will also supplement them with information on the situation at other nuclear energy facilities.

These materials will carry information on recorded deviations from exploitation standards and their causes and will provide assessment of their seriousness, according to the international scale of nuclear events. Measures taken for eliminating violations and for preventing them in the future will also be listed.

We also consider it extremely important to support other forms of public relations. We are ready to answer any questions by our readers on problems of nuclear and radiation safety.

Kazakh Police Hunt for Stolen Cesium-137

*OW2509080992 Moscow INTERFAX in English
1316 GMT 24 Sep 92*

[Transmitted via KYODO]

[Text] So far law-enforcers have been unable to spot those who stole a container with radioactive caesium-137 from the Guriev oil refinery in Kazakhstan several days ago, IF [INTERFAX] was told at the press center of the Kazakh Interior Ministry.

In the lead container there was a capsule with lethal radiation power. According to experts, if the capsule gets opened, such level of radiation would be deadly to any living being within a radius of 20 meters.

The police believe that the container was stolen for one of two reasons: For the purpose of selling it abroad (the value of the container is estimated at 50 to 60 thousand dollars) or using the lead for household needs.

According to the press center, the dangerous cargo was stolen because the refinery's administration failed to ensure appropriate measures of control. The Interior Ministry says that this is not the first occasion when dangerous substances were stolen there: Only a few months ago a glass container with 20 kilos of quicksilver disappeared from the refinery.

Kazakh President Speaks on Nuclear Arms

*PM2909080092 Paris LE MONDE in French
27-28 Sep 92 pp 1,3*

[Interview with Kazakh President Nursultan Nazarbayev by Sylvie Kauffmann in France; date not given]

[Excerpt] [Kauffmann] The postponement of the CIS summit scheduled to take place in Bishkek on 25 September highlighted the problems connected with the integration of the former republics of the USSR, especially because of the disagreements among the nuclear states on the status of strategic armaments. What do you intend to do with your nuclear weapons?

[Nazarbayev] This summit has been postponed until 9 October because the main proposals I had submitted—for a banking union and the creation of an economic coordination council—had not been given sufficient preparation. As regards nuclear weapons, our position has not changed: We have created unified armed forces and Kazakhstan has placed its strategic arms under unified command (of the CIS—LE MONDE editor's note).

[Kauffmann] But Ukraine, which is demanding the "administrative" control of nuclear weapons on its territory, has a different position?

[Nazarbayev] That is Ukraine's problem.

[Kauffmann] But it is also the CIS' problem, and hence yours....

[Nazarbayev] Questions likely to change the content of the Alma-Ata agreement (which formed the CIS—LE MONDE editor's note) must be settled by all the signatories. Having said that, the problems worrying the international community do not come from Kazakhstan; Kazakhstan advocates arms reduction and has signed all the agreements aimed at that. Kazakhstan became a nuclear state against its will, nobody asked our view.... We now want to become a nuclear-free state. So, in a period of seven years, we will reduce strategic arms, in accordance with the START agreements. We have also signed a collective defense agreement with Russia, under the terms of which the parties themselves decide where they will deploy their arms and on what territory. Belarus has decided to transfer its nuclear forces to Russian jurisdiction, that is its right. If Ukraine—and I respect the processes which led it to that, it is not a simple matter—decides to take control of all the nuclear weapons on its territory, it must declare whether or not it is a nuclear power. As far as I know, Ukraine has signed the Washington agreement, it has signed the Lisbon agreement... which make provision for turning it into a nuclear-free country. Now, if the international community wishes to know Ukraine's intentions, it must ask Ukraine! Kazakhstan remains a member of the unified armed forces, it seems to me that that is clear. [passage omitted]

Belarus Signs Nonproliferation Agreement With U.S.

*OW0210103892 Moscow INTERFAX in English
0845 GMT 2 Oct 92*

[From the 1 October "Presidential Bulletin" prepared by Andrey Pershin, Andrey Petrovskiy, and Vladimir Shishlin—transmitted via KYODO]

[Text] Belarusian and U.S. officials have initialed in Minsk an agreement between the two countries entitled On the Elimination of the Consequences of Accidents and the Prevention of the Spread of Weapons of Mass Destruction. The document is in line with Belarus's military doctrine, considered at yesterday's meeting of the republic's Security Council chaired by Stanislav Shushkevich, and provides for U.S. financial and technical assistance in the removal of strategic nuclear weapons stationed in Belarus to Russia.

The document, the text of which IF [INTERFAX] has received today, exempts U.S. military aircraft carrying various kinds of equipment from Belarusian customs. Belarus also pledges not to sue the USA for any damage to Belarusian property or the death or injury of Belarusian personnel which America's activity stipulated by the agreement may cause. Third parties' suits against the USA will be handled by Belarus.

Simultaneously another agreement was initialed in Minsk, that on assistance in the restoration of export control systems in order to prevent the spread of mass destruction weapons. The document provides for U.S. material, technical, personnel training, and other assistance to Belarus worth \$1m [million].

According to our information, Aleksandr Yegorov, the Belarusian Defense Ministry official who initialed the documents on behalf of Belarus, may be appointed Shushkevich's chief military adviser.

Belarus Researching Strategic Arms Destruction

*OW2409195592 Moscow INTERFAX in English
1557 GMT 24 Sep 92*

[Report prepared by Andrey Pershin, Andrey Petrovskiy, and Vladimir Shishlin; edited by Boris Grishchenko; from the "Presidential Bulletin" feature—transmitted via KYODO]

[Text] Stanislav Shushkevich, chairman of the Belarusian National Security Council and head of the parliament, has given instructions to devise a way to remove nuclear missiles from the republic "as soon as possible".

IF [INTERFAX] Note: In accordance with the Lisbon protocol to the treaty on cuts in offensive weapons, strategic nuclear arms should be withdrawn from Belarus within seven years.

As IF's correspondent learned from government sources, under instructions from Shushkevich experts are working on four scenarios for withdrawing 81 mobile missile complexes deployed in Belarus to be carried out within two to five years (separate calculations are made for every version).

According to experts, the removal of the supermodern solid-fuel intercontinental ballistic missiles and other weapons to Russia and financial difficulties connected with it is not the main problem. They believe that the worst problem is to provide employment for the personnel of three divisions of strategic missile forces and for five regiments of strategic aircraft stationed in Belarus. It is believed that most officers and petty officers from these units have no intention of leaving Belarus where they have housing.

AUSTRIA

Vienna Hosts IAEA Talks on Nuclear Management

OW2209032792 Beijing XINHUA in English
0244 GMT 22 Sep 92

[Text] Vienna, September 21 (XINHUA)—Representatives and observers from more than 100 countries, regions and international organizations met here today to discuss peaceful use of nuclear energy and its safe management.

The six-day 36th regular session of the general conference of the International Atomic Energy Agency (IAEA) began today at the Austria Centre which was expected to highlight 27 subjects.

These subjects range from promoting peaceful use of nuclear energy, enhancing the safety factor of nuclear facilities, improving the standard of prevention and protection of nuclear radiation, preventing the proliferation of nuclear weapons to IAEA financial conditions.

Simeon Adekanye, the Nigerian permanent representative to the U.N. agency in Vienna, who is also chairman of the Group of 77 nations, chaired the conference.

IAEA was alleged to be seriously hit by financial crisis due to some member states' default of payments to the agency. IAEA has eased its financial crisis because of Japan's donations and Russia's promise to pay the due share of the former Soviet Union, with some amount paid.

About 50 members of the Greenpeace International staged a demonstration outside the centre, calling for the strict control of nuclear materials and non-proliferation of nuclear weapons. The organization reportedly would continue its demonstration throughout the conference.

GERMANY

Government Offers To Help Russia Destroy CW

LD2409190492 Hamburg DPA in German 1835 GMT
24 Sep 92

[Text] New York (DPA)—Bonn wants to help Moscow in the destruction of Russian stocks of chemical weapons. Foreign Minister Klaus Kinkel made this offer to his Russian opposite number, Andrey Kozyrev, during talks today on the fringes of the UN General Assembly. The Russian Government intends to sign the convention on the removal of these weapons of mass destruction, which has already been finalized.

Kinkel appealed to the Russian Government to make things clear as quickly as possible on the future of the Volga Germans. During a meeting with [Israeli] Foreign Minister Shimon Peres, a specific date for Kinkel's planned visit to Israel was agreed. The visit is to take place from 18-19 November. Kinkel said he had received

support both from his Russian counterpart and from Chilean Foreign Minister Enrique Silva Cimma for Bonn's long term desire to become a permanent member of the UN Security Council. Following his four days of talks in New York, Kinkel intends to fly home this evening one day earlier than planned, to take part in tomorrow's debate on Europe in the Bundestag.

Partnerships Formed With E. European N-Plants

AU3009162692 Hamburg DIE WELT in German
30 Sep 92 p 13

["HH" report: "Help for Eastern European Nuclear Power Plants"]

[Text] Bonn—In order to improve the safety of nuclear power plants of the Soviet type, the operators of German nuclear power plants will support their Eastern European colleagues free of charge in the future. As Joachim Grawe, general manager of the Association of German Electric Power Plants (VDEW) told DIE WELT, the basis for cooperation was created with partnerships for all 17 nuclear power plants in the Commonwealth of Independent States (CIS) and in Eastern Europe (except for Kozloduy).

The German operators have an advantage because of the mere fact that since German unification in virtually all the sites there have been eastern German experts who speak Russian and formerly worked in the Greifswald nuclear power plant (of Soviet production), which has meanwhile been closed down, it was stated. There a simulator for Eastern European reactor operators is planned since they are familiar with this model.

The question of partnerships with reactors of the Chernobyl type (RBMK) was regarded as particularly delicate. Originally, it was accepted that these reactors would soon be closed down, so no cooperation was planned. "In the West, it is beginning to be accepted that it is not possible to switch them off immediately because of the high level of dependence on their output," Grawe stressed.

The compromise: For RBMK reactors, cooperation contracts (for example, Grohnde with Chernobyl) were limited to one year, while for the rest they are unlimited. According to Grawe, "no responsibility is assumed" with the conclusion of the contracts. Moreover, according to the knowledge of the World Association of Nuclear Operators (WANO), which also supported the conclusion of the German cooperation contracts, measures to improve operations and safety have been taken in the former Soviet Union since the Chernobyl catastrophe. Question of organization, quality securing, the training of reactor operators, maintenance, measuring, radiation protection, public relations, and contacts with the authorities are in the foreground of the German help.

This know-how transfer, that is, the software, cannot replace the hardware—the "real investments." A financier has not yet been found for the relief program for the

improvement of plants that was presented by Environment Minister Klaus Toepfer at the Munich world economic summit and whose costs are estimated at between \$12 and 20 billion.

It has recently also been heard in Moscow that the producers want to pursue the development in the CIS itself and "only" want to avail themselves of Western financing.

Hesse, Lower Saxony To Phase Out Nuclear Energy

AU0110152692 Frankfurt/Main FRANKFURTER
RUNDSCHAU in German 1 Oct 92 p 1

["me" report: "Two Laender Are Planning To Phase Out Nuclear Energy"]

[Text] Wiesbaden, 30 September—The laender of Hesse and Lower Saxony, both of which are governed by a coalition between the Social Democrats and Greens, are planning to propose a "law on phasing out nuclear energy" in the Bundesrat, in response to the plans of Federal Environment Minister Klaus Toepfer (Christian Democratic Union) to amend Bonn's nuclear law. The objective of the initiative is a "multi-laender draft" as a replacement for the current nuclear law, Hesse Environment Minister Joschka Fischer (Greens) said in Wiesbaden on 30 September, and thus a clear opposite position by the majority of the laender chamber to the course of the Federal Government. In a "situation that is dramatically changing, in terms of power policy on the federal and laender level," the issue of nuclear energy also urgently requires a "decision."

The Hessian-Lower Saxon motion first intends to adopt 10 "vital points" for a phase-out law in the Bundesrat, on the basis of which a subsequent draft law should be worked out. These vital points include that no new licenses for building and operating nuclear plants will be granted, with the exception of plants for the treatment of radioactive waste (such as plutonium). Only final storage without reprocessing should be accepted as valid evidence for the disposal of nuclear plants.

Contracts on nuclear reprocessing abroad should be canceled, and reprocessing in Germany should be banned. Under this condition, Hesse will not refuse to make "its contribution" in order "eventually to phase out" the plutonium economy, Fischer said.

UNITED KINGDOM

Rifkind Urges Nuclear Partnership With France

LD3009183592 London PRESS ASSOCIATION
in English 1748 GMT 30 Sep 92

[By Charles Miller, PRESS ASSOCIATION defense correspondent]

[Text] Defence Secretary Malcolm Rifkind tonight urged France to forge links with the UK on nuclear defence and move closer to NATO. Behind-the-scenes negotiations have been under way for more than a year between Britain and France in a bid to find ways to co-operate on nuclear issues. France, facing a lack of resources to replace its ageing arsenal and a growing anti-nuclear lobby, is keen to move ahead with a re-arranged Euroforce. The Commons Defence Select Committee has urged greater co-operation between the UK and French ballistic missile submarines in terms of targeting and patrol patterns. British ministers are known to support the moves but emphasise it must not be at the expense of the Americans.

Mr Rifkind told an international strategic conference in Paris that NATO would continue to exist "at the centre of our strategic thinking". "For Europe and America to develop separate security strategies would be in the interests of neither continent," he said. "Whatever the outcome of the presidential election in November, the United States Administration will remain firmly internationalist and fully aware...[ellipses as received] of its common interests with the European nations."

He is strongly opposed to France's efforts to set up a strictly European defence arm alongside NATO based on a Franco-German army corps. France left the Alliance's military structure in 1966. He urged "closer co-operation and cohesion between the two West European nuclear powers (Britain and France)".

Mr Rifkind said the two countries should co-operate on nuclear matters in the technical, financial and operational fields. "The more closely we can concert our policies, the more weight we shall carry; where we have failed to do so—as for example over nuclear testing—the outcomes tends to be to our disadvantage."

He made it clear that co-operation should serve as "a powerful underpinning to collective deterrence within the Alliance, by demonstrating identity of interest and purpose between NATO's European nuclear powers".

All of Britain's nuclear weapons are assigned to NATO and the government has pledged its long-term commitment to the Alliance. While some elements in the French Government have pressed for an Anglo-French European nuclear umbrella, Britain insists the US must not be squeezed out. Reduced links with the US would inevitably result in problems for Britain, with less intelligence and satellite information exchange affecting key areas such as targeting and surveillance.

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